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# Executive Summary

## Introduction

The External Quality Review of MC+ Managed Care is federally mandated by the Centers for Medicare and Medicaid Services (CMS), which partially funds and oversees State Medicaid programs. BHC, Inc., is a PRO-Like Entity certified by CMS to conduct External Quality Reviews of Medicaid managed care in all 50 States. The present evaluation is the first year of evaluation by the current External Quality Review Organization (EQRO). As a result, there are some limitations in comparing previous years' findings with current findings due to variations in the methods employed. As much as possible, historical information and data were incorporated to examine trends over time in the delivery of MC+ Managed Care services. The basis for the report findings were medical record reviews for MC+ Managed Care Members, administrative databases, management reports, on-site reviews of individual health plans, and surveys of providers. The reader is cautioned to attend carefully to the comparison groups and time frames across the available sources of data.

## Organization of the Report

This Executive Summary provides program background information and a description of the MC+ Managed Care Health Plans and Regions. This summary also provides an overview of the key findings, accomplishments, and opportunities for improvement based on the External Quality Review of the MC+ Managed Care Program. The remainder of the document also presents findings regarding access to and quality of care provided through the MC+ Managed Care Program

The full report is organized as follows:

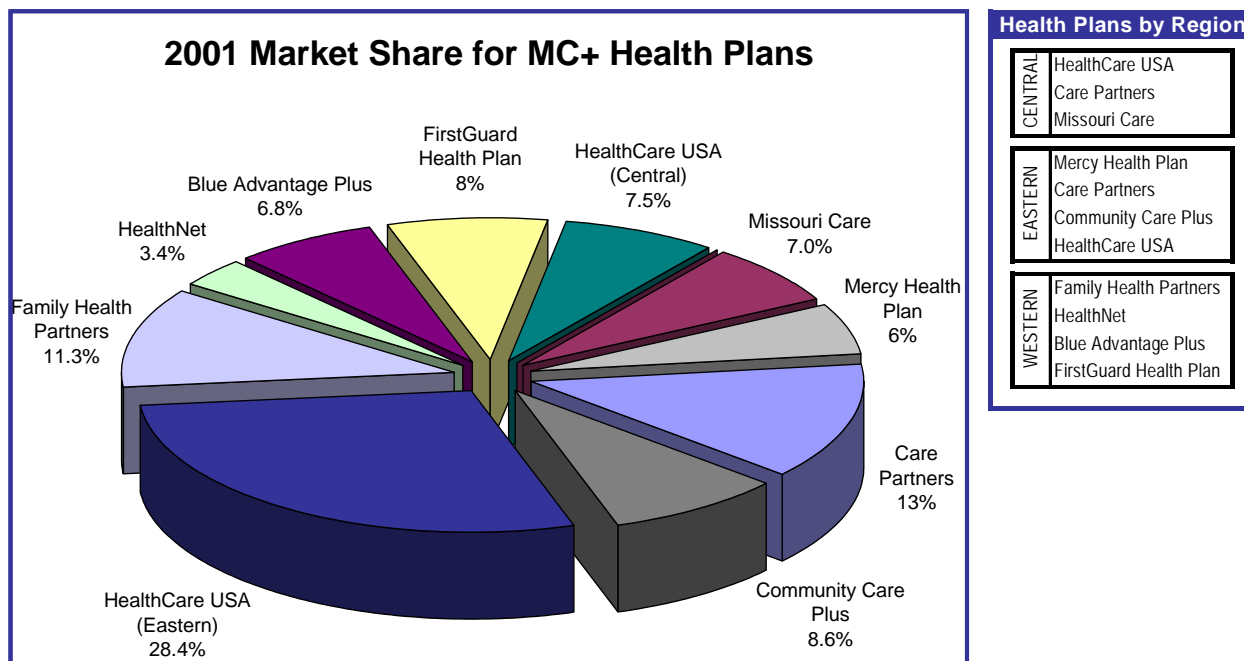
- The first section describes the MC+ Program, administration, areas of operation, and quality management processes.
- The second section provides descriptive information on the health plans and providers that deliver health care services to MC+ Managed Care Members;
- The third section describes characteristics of MC+ Managed Care Members enrolled in the MC+ and MC+ for Kids' programs.
- The fourth section presents and summarizes key findings. In addition, comparisons were made between MC+ Fee-For-Service Recipients and Managed Care Members. Individual health plan reports identify health plan processes, relevant data and interpretations, accomplishments, and opportunities for improvement. Specific details regarding methods,

procedures and data sources (Appendix A); protocols employed (Appendix B); data tables (Appendix C); and other reference sources are also provided (Appendix D).

## Background

The MC+ Program is the Medical Assistance Program (MAP) for the State of Missouri. There are two primary systems through which Missouri administers the MAP: MC+ Managed Care and MC+ Fee-for-Service. The Program is administered by the Division of Medical Services (DMS) in the Department of Social Services (DSS). The DMS contracts with health plans to provide health services to members in the managed care regions of the State through negotiated capitation rates per member per month (MC+ Managed Care). The DMS also pays for health care services directly to health service providers in the remaining areas of the State, and for those recipients who meet specific eligibility criteria to opt out of the mandatory MC+ Managed Care Program (and receive care through the MC+ Fee-for-Service system).

The MC+ Managed Care Program is administered and monitored by the DMS, with participation from consumers and advocates (the Consumer Advisory Committee), representation from other State agencies (through the QA & I Advisory Groups), and involvement from health plan administrators (All-Plan Committee). The following is a summary of the MC+ Managed Care Program and health plan characteristics.



Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen, December, 2001.

- MC+ Managed Care was implemented on September 1, 1995 in the Eastern Region of the State (in Franklin, Jefferson, St. Charles, St. Louis City, and St. Louis Counties). Five counties were added in late 2000 (Lincoln, St. Francois, Ste. Genevieve, Warren, and

Washington). As of December 31, 2001, four health plans provided services to a total of 222,142 MC+ Managed Care members (56.1% of members). These plans were:

- Mercy Health Plan (23,105 members),
  - Care Partners (52,640 members),
  - Community Care Plus (34,129 members), and
  - HealthCare USA (112,268 members).
- MC+ Managed Care began in the Central Region on March 1, 1996 (Audrain, Boone, Callaway, Camden, Chariton, Cole, Cooper, Gasconade, Howard, Miller, Moniteau, Monroe, Montgomery, Morgan, Osage, Pettis, Randolph, and Saline Counties). In 2001, three health plans provided services to 57,458 MC+ Managed Care Members (14.5% of members). These plans were:
    - Missouri Care (27,821 members),
    - Health Care USA (29,637 members), and
    - Care Partners, which exited the Central Region MC+ Managed Care market in January, 2001.
  - MC+ Managed Care began in the Western Region on January 1, 1997 (Jackson, Platte, Clay, Ray, Lafayette, Johnson, and Cass Counties). In 2001, four health plans provided services to 116,268 MC+ Managed Care members (29.4% of members). These plans were:
    - Family Health Partners (44,931 members),
    - HealthNet (13,570 members),
    - Blue Advantage Plus (27,108 members),
    - FirstGuard Health Plan (30,659 members), and
    - HealthNet exited the MC+ Managed Care Program in 2001.
  - The MC+ Managed Care Program experienced a 16.5% increase in enrollment between December 2000 and 2001. Much of this was accounted for by the expansion of MC+ Managed Care into the five new (Eastern Region) counties in late 2000.

## Accomplishments

- Quality improvement projects increased the submission of encounters and complaints (member and provider) were implemented.
- Fraud and Abuse compliance plans were developed in collaboration with DMS staff approving health plan policies and procedures. Health Plans have appointed Compliance Officers.
- Health plans have increased the number of contracts with local public health agencies, school-based providers, and dental providers for services and sharing member utilization data.

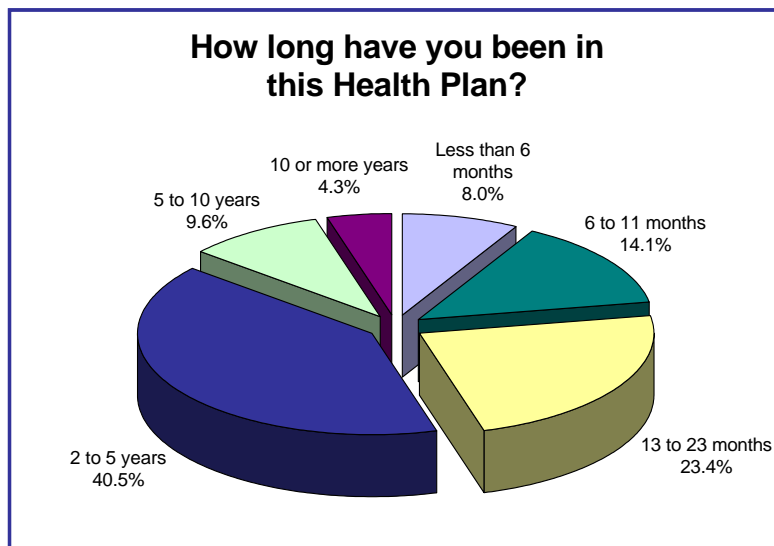
- The DMS and Missouri Department of Insurance (MDI) share a staff member to assess the access and availability of MC+ Health Plan provider networks. This activity is conducted in accordance with MDI standards for all health maintenance organizations (HMOs) in the State of Missouri.
- The standard Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) screening form was implemented, along with statewide provider training as a result of the efforts of the MC+ Medical Directors Advisory Group.
- Performance-based outcomes for EPSDT services derived from HCFA-416 participation rates were utilized for State monitoring and contractual requirements.
- The State and MC+ Health Plans continued collaborations to increase childhood immunizations rates.
- The reporting of blood lead levels from local public health agencies to health plans for all children who have received blood lead level tests was mandated by statute. This change resulted in increased laboratory report for all blood lead level tests rather than only those with positive lead screens. This action facilitates knowledge of blood lead level testing, and documentation that children have received this service and tracking of high levels of toxicity.
- MC+ Reference Guides were developed as a tool to educate Division of Family Services/Children's Treatment Service workers and Providers regarding the MC+ Managed Care Program. These efforts were implemented to facilitate continuity and coordination of care.
- DMS addressed provider concerns about dental codes by updating management information systems which reduced problems with claims submissions.
- Health plans have been proactive. They have identified problems with dental care access. Problems with providers have been dealt with by implementing corrective action plans or changing dental care vendors. A legislative change will improve access to preventive dental care by using of dental hygienists. The health plans are contracting with the schools to provide for school-based dental services.
- Mental health penetration and performance measures for 1999 and 2000 MC+ health plans were reported and evaluated. Quality improvement projects have been initiated as a result of the evaluation.

#### **MC+ Member Enrollment**

- One indication of the success of education regarding a managed care program is the rate at which members choose their own health plan. Based on MC+ Managed Care Member responses on the Consumer Assessment of Health Plans Survey (CAHPS; a satisfaction

survey mailed to members), 71.6% of MC+ Managed Care Members responding to a mail-out survey reported that they obtained information about health plans before signing up. On the same survey, 79.2% of these members reported that they chose their health plan themselves. Most reported that there was “no problem” (74.9%) or only a “small problem” (18.6%) understanding the materials provided regarding the MC+ Managed Care Program.

- Eighty percent (80.5%) of MC+ Managed Care Members responding to the survey were able to identify that they or their child were enrolled with a health plan. Twenty-three percent (23.4%) reported a long-term membership with their current health plan (13 to 23 months). Over forty percent (40.5%) reported being enrolled in the same health plan from two to five years.



Source: CAHPS Survey, Missouri Department of Social Services, Division of Medical Services, 2001.

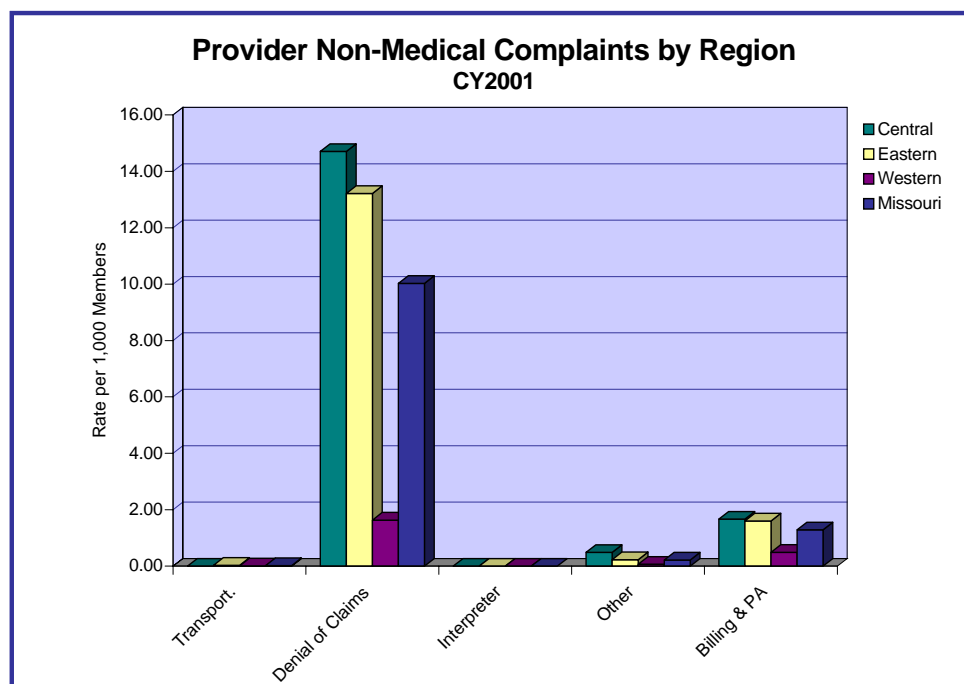
### Provider Network Adequacy

- The provider networks for MC+ Health Plans were deemed to be adequate according to MDI standards on a Region-wide basis with regard to primary care providers and facilities. MDI standards require that Health Plans meet a 95% threshold of availability of each type and number of provider within specific distances of members. When this threshold is not met, a Health Plan may request an exception to the threshold if adequate documentation of efforts to contract with providers is submitted, and assurances for out-of-network treatment are met. The adequacy of the network is examined for each health plan by using the total number of beneficiaries for the entire region rather than the number of beneficiaries in the health plan. This approach to evaluating network adequacy ensures provider accessibility based on the entire population of beneficiaries in each MC+ region.

### Provider Complaints

- One measure of the ability of the MC+ Health Plans to retain a sufficient number of primary care, specialty, and other health service providers is the level of satisfaction of providers with health plan services, as measured by provider complaints to health plans. In 2001, the rate of medical complaints was .33 per 1,000 members, while the rate of non-medical complaints was 11.56 per 1,000 members.

- The highest rates of medical complaints were related to the denial of services (.26 per 1,000 members), while the highest rates of non-medical complaints were related to the denial of claims (10.03 per 1,000 members). Providers in the Central Region reported the highest rates of complaints for denial of services and denial of claims (.61 per 1,000 members and 14.71 per 1,000 members, respectively).



Source: Missouri Department of Social Services, Division of Medical Services, 2001.

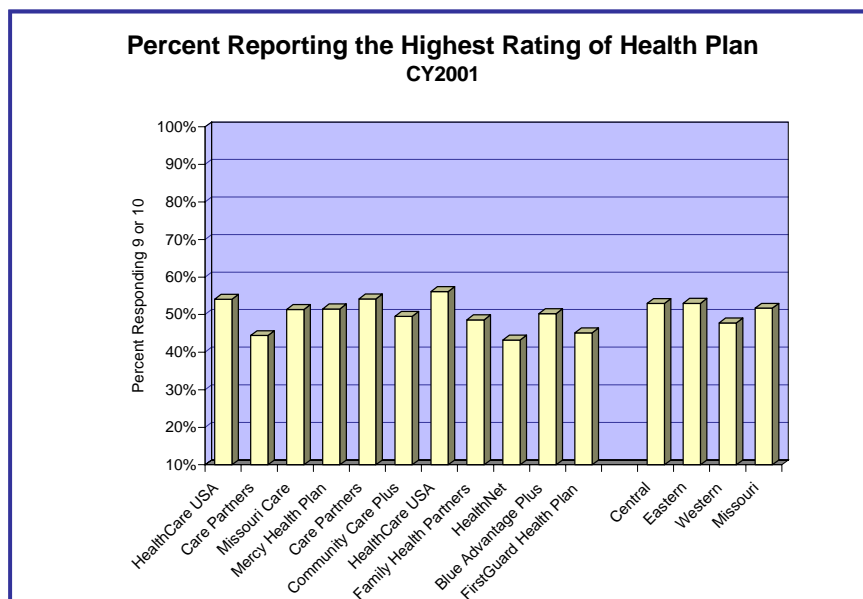
- On the CAHPS, in 2000, Fee-For-Service Recipients reported greater ability in getting help when calling the doctor's office, getting care as soon as they wanted, getting care that was needed, and accessing care without long waits than MC+ Managed Care Members. Those findings do not account for differences between rural and urban regions.

#### MC+ Managed Care Member and MC+ Recipient Satisfaction with Health Services

- Although statistically different, there was only a slight difference between Fee-for-Service Recipients and Managed Care Members regarding their satisfaction with providers. On the CAHPS, MC+ Recipients were more satisfied than MC+ Managed Care Members with the care provided by their personal doctors in 2000 (averages of 8.43 and 8.36 on a scale from 1 to 10, with 10 being the highest). Again, the findings do not control for differences between rural and urban regions, such as provider practice patterns.
- On the CAHPS, MC+ Managed Care Members in the Central Region were more satisfied with their personal doctor than members in the other Regions in 2001 (62.5% in the Central Region gave the highest ratings of their personal doctor, while 53.6% and 55.0% of members in the Eastern and Western Regions gave the same high ratings for their personal doctor).



- On the CAHPS, significant differences across MC+ Managed Care Regions were found in member ratings of their dental care. The scale ranged from 1 to 10, with 10 being the most satisfied. The findings by region were:
  - Eastern Region members reported average ratings of satisfaction with dental care (5.50)
  - Central Region member average ratings were 7.32, and
  - Western Region member average ratings were 7.12.
- MC+ Managed Care Members in the Eastern and Central Regions were the most satisfied with their health plan, being more likely to give their health plan the highest ratings.
  - 53.0% for the Central and Eastern Regions; and
  - 47.8% for the Western Region.



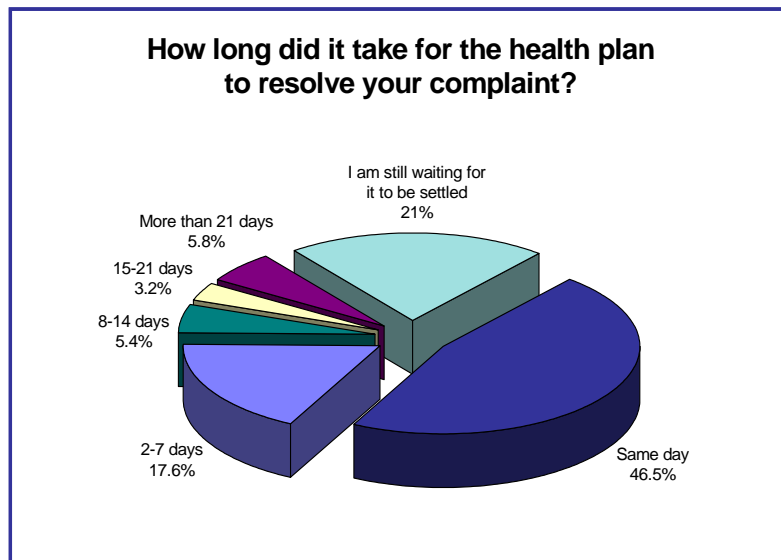
Source: CAHPS Survey, Missouri Department of Social Services, Division of Medical Services, 2001.  
 Note: Health plans are listed in order of Central, Eastern and Western regions.

| Health Plans by Region |                        |
|------------------------|------------------------|
| CENTRAL                | HealthCare USA         |
|                        | Care Partners          |
|                        | Missouri Care          |
| EASTERN                | Mercy Health Plan      |
|                        | Care Partners          |
|                        | Community Care Plus    |
| WESTERN                | Family Health Partners |
|                        | HealthNet              |
|                        | Blue Advantage Plus    |
|                        | FirstGuard Health Plan |

#### MC+ Managed Care Member Complaints to MC+ Health Plans

- Less than 10% (9.2%) of MC+ Managed Care Members surveyed reported that they made a complaint with their health plan in 2001.
- The majority of those who reported logging a complaint indicated that it was resolved within one day (46.5%), or within one week (an additional 17.6%). A majority (60.1%) reported that the complaint was resolved to their satisfaction.

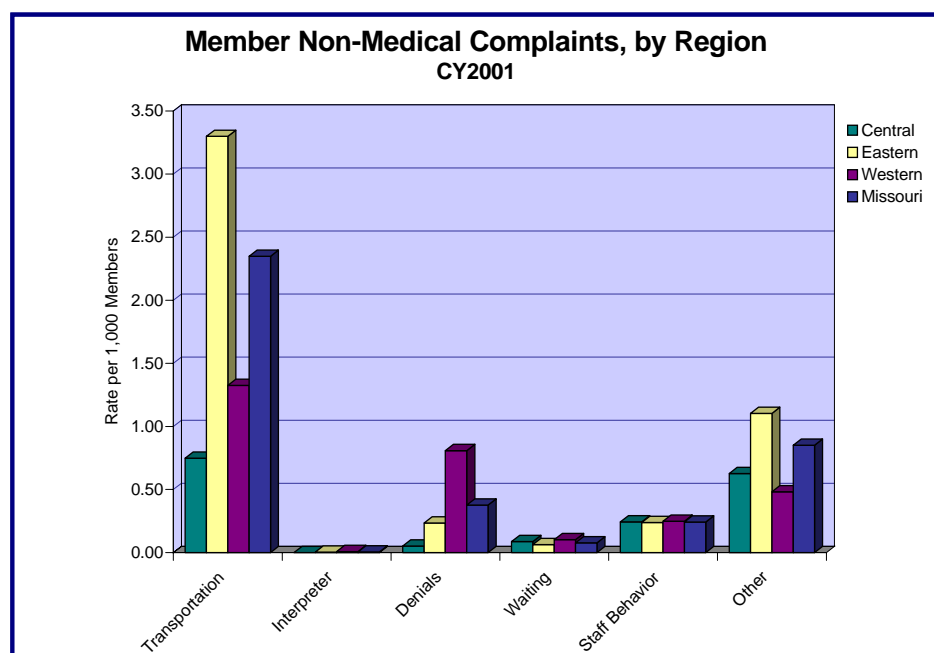
- DMS and the health plans implemented an improvement project to increase reporting of complaints that may have contributed to the increase in reporting of complaints. There was an increase in the rate per 1,000 members of medical and non-medical complaints to health plans from 2000 to 2001. There was a 52.9% increase in member medical complaints per 1,000 members from 2000 to 2001 (from .84 to 1.28 medical complaints per 1,000 members); and a 53.8% increase in member non-medical complaints per 1,000 members during the same time period (from 2.54 to 3.90 non-medical complaints per 1,000 members).



Source: CAHPS Survey, Missouri Department of Social Services, Division of Medical Services, 2001.

The largest proportion of member medical complaints in 2001 were regarding the quality of care (.45 per 1,000 members; member not getting better, PCP not helping, disagreement with treatment or diagnosis). MC+ Managed Care Members in the Western Region logged the lowest rate of medical complaints per 1,000 members (1.09 complaints per 1,000 members), with an observed decline in rates of complaints in the Western Region from 2000 to 2001 (7.2% decline).

- An increase in complaints and the change in the method for lodging complaints may have been related to an increase in transportation complaints. There was a 122% increase in complaints regarding transportation from 1.06 per 1,000



Source: Missouri Department of Social Services, Division of Medical Services, 2001.

members in 2000 to 2.35 per 1,000 members in 2001. Member non-medical complaints consisted largely of complaints about transportation services (2.35 complaints per 1,000 members), which were highest in the Eastern Region (3.30 complaints per 1,000 members).

#### **MC+ Consumer Advocacy**

- Participation on the MC+ Consumer Advisory Committee was reported to be a positive experience for participants.
- Participants believed that participation would be enhanced through rotating meetings throughout the managed care regions.
- Health care for children was considered one of the best aspects of the program.
- Participants believed that patient education regarding health care could be improved.

#### **Health Plan Services and Outcomes**

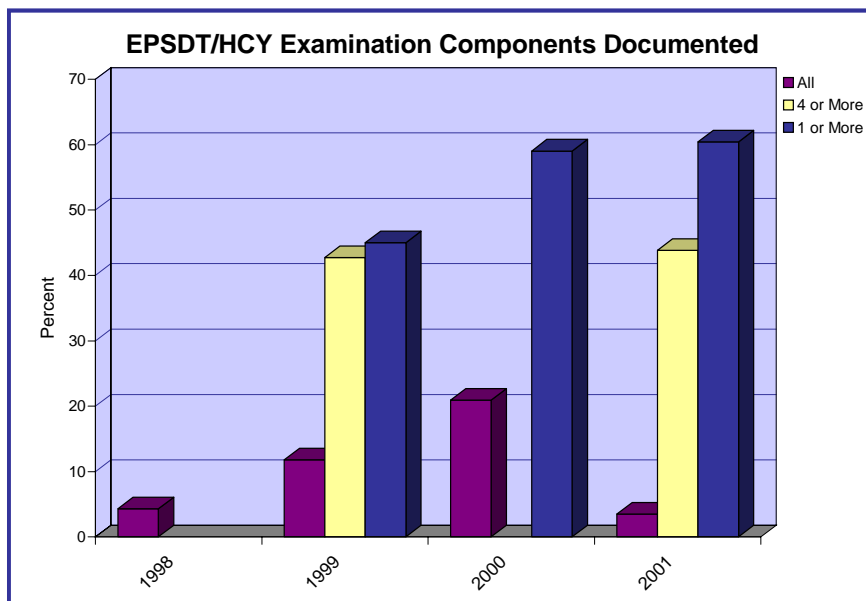
##### **Acute Care Services.**

- On the CAHPS in 2000, MC+ Managed Care Members were more likely than MC+ Recipients to report having gone to the emergency room in the past 12 months (an average of 5.24 compared to 2.98 times respectively). Among MC+ Managed Care Members, those in the Central Region reported the lowest levels of emergency room visits (an average of .67 visits), while those in the Eastern Region reported the highest levels (an average of 4.58 visits).
- Utilization of services for preventable hospitalization was lower for MC+ Managed Care Members than MC+ Recipients (those in fee-for-service payment mechanisms) (Missouri Department of Health and Senior Services).
- Based on State administrative data, the rate of increase in encounter claim submission (40.5%) was consistent with the rate of increase in enrollment (38.4%) between FY2000 and FY2001.

##### **Early and Periodic Screening, Diagnosis, and Treatment (EPSDT).**

- EPSDT participation rates as documented through DMS administrative data (HCFA-416) indicated a 51% participation rate for MC+ Managed Care Members in December, 2001. Comparison data for National Medicaid EPSDT participation rates indicate a 52% rate of completion in March, 2001.
- The rate of medical record documentation of all 10 EPSDT components for eligible children under 6 years of age was 3.5% in 2001, consistent with the rate documented in 1998 (4.3%), and lower than the rate reported in the 2000 EQRO report (20.9%). Small record review sizes, or variations in methodology, may account for the variation in results.

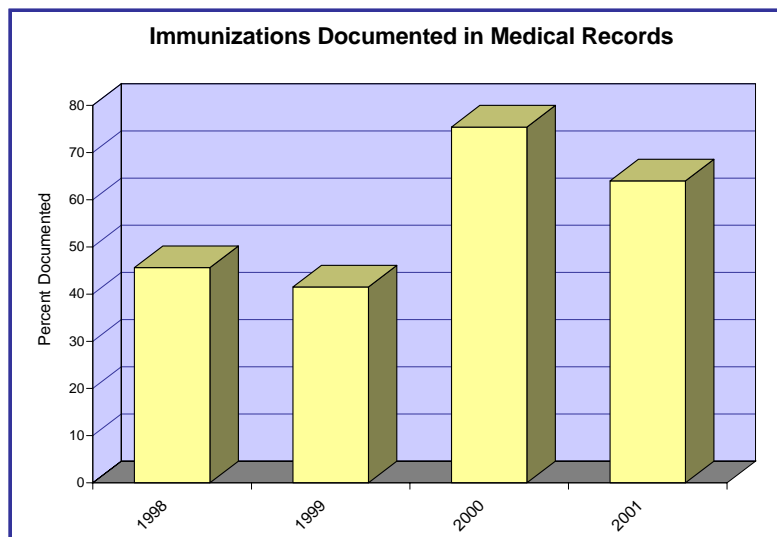
- The rate of medical record documentation of four or more EPSDT components for eligible children under 6 years of age was 43.8%, consistent with the rate reported in the 2000 EQRO Report.
- The rates of participation (based on encounter data on the HCFA-416) are higher than the rates of documented EPSDT examinations recorded in medical records.



Source: BHC, Inc., CY2001 EQRO Medical Record Review, 2002.

#### Immunizations.

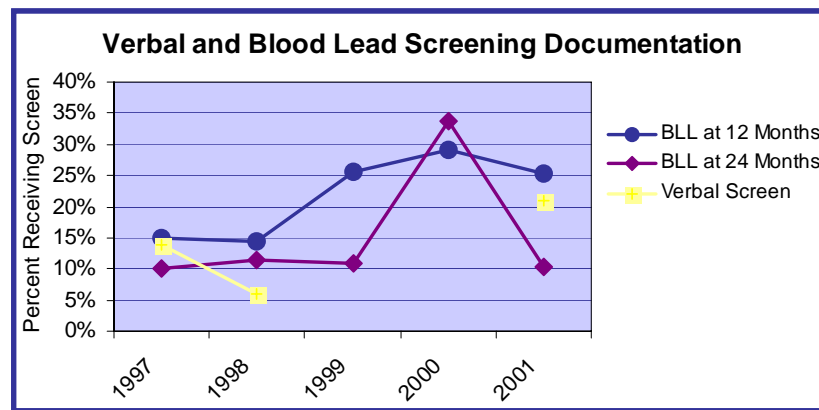
- Medical record documentation of immunizations for children birth to six years of age indicated a notable decline from 2000 to 2001 (from 75.4% to 64.0%). One potential reason for the decrease may be due to a nationwide vaccine shortage as well as differences in methodology for the medical record review. The rate for 2001 was higher than the rates in 1998 (45.5%) and 1999 (41.5%).



Source: BHC, Inc., CY2001 EQRO Medical Record Review, 2002.

#### Lead Level Testing and Screening

- Medical record review of blood lead testing indicated documentation rates of 25.4% for 12-month olds and 10.3% for 24-month olds. These are lower than found in the 2000 EQR Report, but may partially be accounted for by methodological variation across data collection



Source: BHC, Inc., CY2001 EQRO Medical Record Review, 2002.

periods. It should be noted that medical records alone may not provide a complete picture of actual services provided.

- The rate of documented verbal lead screens in available medical records was 36.4%.
- Providers responding to a paper-and-pencil Provider Lead Screening survey conducted by the EQRO in conjunction with the medical record requests reported using the Missouri Department of Social Services Lead Risk Assessment Guide all or most (78.7%) of the time. This was not reflected in the medical record review, where 36.4% of the records that contained documentation of a verbal lead screen (20.9%) contained the State-mandated Lead Risk Assessment Guide.
- On the same survey, less than half (44.3%) of providers reported having a health care worker who is trained to draw blood on site, which may present a barrier for families to accessing laboratory services. If a clinic or office is not able to draw blood for a lead screen, this involves the family in another healthcare visit with a laboratory that can provide this service.
- On the same survey, other barriers reported by providers included parental unwillingness (88.6%), lack of medical necessity (22.8%), and member transportation problems (13.8%).

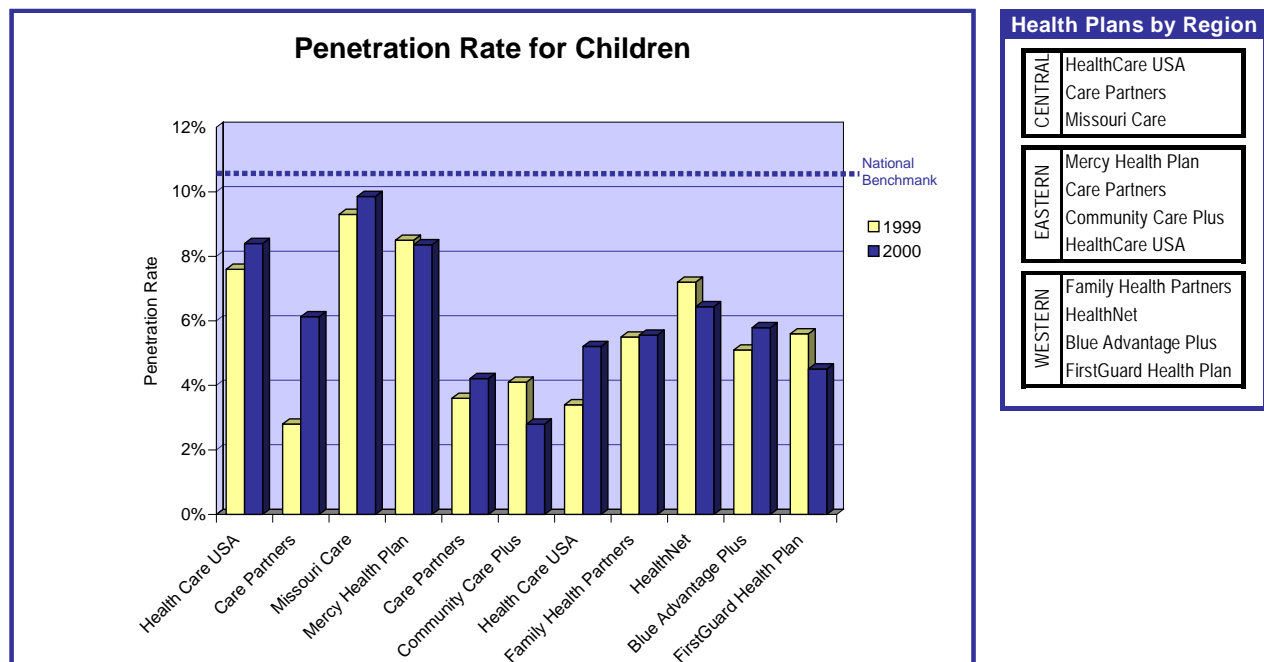
#### Dental Services.

- The rates of dental encounters per 1,000 MC+ Managed Care Members decreased statewide between FY2000 and FY2001, from 592 per 1,000 members to 566 per 1,000 members. According to the network analysis, all but one Health Plans had an adequate number (they met the 95% threshold) of general dental practitioners for all MC+ Managed Care Members in the Region.

- Although all Regions passed the 95% threshold for general dentistry providers, the rate of dental encounters per 1,000 members were lower in the Central Region (413 per 1,000 members), than the Eastern and Western Regions (566 and 647 encounters per 1,000 members).
- MC+ Recipients reported more dental visits on average than MC+ Managed Care Members (an average of 1.46 and 1.27 visits in the past 12 months, respectively) in 2000.
- On the 2000 CAHPS, member satisfaction survey data revealed that MC+ Managed Care Members in the Western Region were more satisfied with dental care and treatment than those in the Eastern Region.

#### Mental Health Services.

- The statewide penetration rate for mental health services for children increased from 1999 to 2000 (4.0% to 4.2% for children 0–12 years of age; and 7.1% to 8.0% for adolescents 13–17 years of age). The national average for children enrolled in Medicaid is 10.5%. The national average likely includes children in foster care, whose services are carved out of MC+ Managed Care in Missouri, likely partially accounting for the lower penetration rates observed among the MC+ Managed Care Members. Epidemiological studies of community-based samples of children have most commonly identified a 10% rate of Serious Emotional Disturbance (SED) in the general population. For children enrolled in Medicaid (including foster children), the incidence rate of SED has been found to be up to 50%.



Source: Missouri Department of Social Services, Division of Medical Services, Mental Health Subgroup of the Quality Assessment and Improvement Committee, 2001.

Note: Health plans are listed in order of Central, Eastern and Western regions.

- The average rates of penetration for mental health services for children (under 18 years of age) were generally higher in the Central and Western Regions (ranging from 6.1% to 9.9%) than in the Eastern Region (ranging from 2.8% to 8.4%).

#### Prenatal Care and Smoking.

- The documentation in EQRO 2001 medical records reviewed for MC+ Managed Care Members regarding essential components (those required by the State, based on American College of Obstetricians and Gynecologists; ACOG) was conducted. These include prenatal visits, such as interval history, vital signs, and lab tests. Completion of these components ranged from 73.3% to 91.0%.
- In 42.1% of medical records, a pregnancy risk assessment was present. The rate of medical record documentation of smoking status by pregnant women was 30.7%.
- The DHHS indicator, “Smoking During Pregnancy” shows that rates of smoking during pregnancy increased slightly from 1999 to 2000; this was most pronounced in the Central Region (34.9 to 38.4%).

## Opportunities for Improvement

### Provider Network Adequacy

- DMS, MDI, and MC+ Health Plans should continue to monitor speciality, facility, and ancillary service provider availability in specific regions and with individual health plans to ensure accessibility of services in- and out-of-network for MC+ eligible Members. In those instances where provider adequacy is not met due to an insufficient supply of providers or facilities in particular counties (e.g., St. Clair or Henry), consideration should be given to making modifications to the threshold in the Region based on the highest performing health plan or some other standard (e.g., the average adequacy of all health plans in the region).
- Particular attention should continue to direct attention toward monitoring the adequacy and availability of mental health services in the Eastern Region. Plans and their mental health contractors may need to devise more alternative approaches to treating adults and children, with a more preventive focus in order to avoid unnecessary treatment in more restrictive environments as a result of the lack of availability of outpatient services.

### Member Satisfaction

- It is recommended that MC+ Health Plans and DMS continue to improve the education of members regarding the complaints process, and that data regarding member complaints continue to be collected and analyzed for process improvement purposes. Such data are also important in assessing provider network adequacy, quality of care, and vendor services.

- Data regarding consumer satisfaction with health plans and physicians are also important, and should continue to be used for member education purposes.
- Rotate Consumer Advisory Committee meetings across the three MC+ Regions to promote more consumer involvement. This action may also offer an opportunity for Health Plan Consumer Advisory Committees to become involved in feedback and projects that contribute to the improvement of the MC+ Program.

#### EPSDT

- Individual health plan performance for partial and full completion of the EPSDT screens should continue to be monitored through medical record review, analysis of claims, and standard audit measures of health plans.
- To increase rates, it is recommended that health plans continue to educate providers and conduct individual provider feedback for completion of partial and full EPSDT services; and for claims submission.
- Several health plans have used the HCFA-416 claims data to identify Members who have not received a well-child visit. Other plans should consider using such this method in addition to the other methods in use.

#### Immunizations

- Given the vaccine shortage, it is notable that there is an improvement in the rates of immunizations since 1999. However, continued improvement is necessary to meet nationally accepted standards for childhood immunizations.
- It is recommended that health plans continue to conduct individual provider feedback and education regarding the immunization guidelines and immunization goals.
- Documentation of vaccinations in medical records that are “up-to-date” should indicate which vaccinations were administered and the dates they were administered so that the vaccinations could be included in the rates.
- Also, health plan efforts to obtain information from public health databases and through the use of specialized software should continue, with feedback to providers for maintenance of documentation in medical records.

#### Blood Lead Levels

- Additional provider education on the mandates and statutes for blood lead testing for blood lead toxicity at 12- and 24-months of age should continue to be a priority.



- Continue to develop data systems to monitor the completion of statutorily mandated blood lead testing.
- Alternative office-based procedures (e.g. capillary testing) should be instituted whenever possible as an initial screen and patient/parent education tool regarding the importance of blood lead screening and risk factors. Although this is not a substitute for venapuncture, it may facilitate patient education and follow-up for questionable findings.

#### **Dental Care**

- It is recommended that the rates of dental care utilization continue to be monitored, especially in the Eastern Region where there are higher levels of dissatisfaction with dental care. Across the State, it is anticipated that rates of dental claims should increase over the next year, partly due to improved claims processing procedures, improved claims submission, increased access to providers, and increased preventive dentistry.
- Member satisfaction items relating to dental care and utilization from the Consumer Assessment of Health Plans should continue to be monitored to further evaluate access to dental care.
- Also, member complaints to dental vendors should continue to be examined separately and across time by Health Plans to evaluate barriers to access to dental services.

#### **Mental Health**

- The State and health plans should continue to monitor MC+ Managed Care Member complaints, penetration rates, utilization, and access to care.
- Health Plans should be conducting provider-specific feedback for rates of follow-up after hospitalization at least annually.

#### **Prenatal**

- The State and health plans should strongly encourage providers to assess smoking status, initiate smoking cessation counseling and interventions, and document these interventions.

#### **Encounter Submission**

- The State and health plans should continue their efforts to increase encounter submission by Managed Care providers so that this data source can be more fully utilized for quality improvement efforts.

# Missouri's MC+ Program

## Administration

MC+ is the Medical Assistance Program for low income pregnant women, children, and uninsured parents in the State of Missouri. The Missouri Department of Social Services (DSS), Division of Medical Services (DMS) is designated as the agency charged with the administration of Missouri's Medical Assistance Program and the federal Medicaid (Title XIX and Title XXI) programs, through the 1915(b) (managed care) and 1115 Waivers. In addition to the Division of Medical Services' oversight, the Centers for Medicare and Medicaid Services (CMS) monitor MC+ managed care activities through the Regional Office in Kansas City, Missouri and the Division of Integrated Health Systems in Baltimore, Maryland<sup>1</sup>. Administering the MC+ program involves extensive coordination and communication among all stakeholders.

The Division of Medical Services is headed by Gregory A. Vadner, Director, and Pam Victor, Deputy Division Director, and consists of five main departments: Administration, Finance, Quality Services, Information Systems, and Program Management Appendix D).<sup>2</sup> As the state agency responsible for the Missouri Medicaid Program, DMS has adopted the following Mission and Vision:

### Mission

The purpose of the Division of Medical Services is to purchase and monitor health care services for low income and vulnerable citizens of the State of Missouri. The agency assures quality health care through development of service delivery systems, standards setting and enforcement, and education of providers and beneficiaries. We are fiscally accountable for maximum and appropriate utilization of resources.

### Vision

Missouri's low income and vulnerable citizens will have access to excellent health care in order to maximize their quality of life and independence. We are committed to purchasing services that are cost effective and appropriate. We value and respect our partners in health care delivery<sup>3</sup>.

The goal of DMS is to adhere to this mission and vision by contracting with qualified health plans in the three Regions of the State of Missouri (Eastern, Central, and Western), to provide health care services to enrolled MC+ members in exchange for a per member per month capitated payment<sup>4</sup>. Qualified health plans submit responses to Requests for Proposals (RFP) issued by the

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<sup>1</sup> State of Missouri Division of Purchasing and Materials Management, (June 10, 2002). *Medicaid Managed Care - Eastern and Central Region*. Draft RFP No. B3Z02226. Req#: NR 886 25752010655 & NR 886 25752010656.

<sup>2</sup> *DMS Organization*. Retrieved September 5, 2002, from Missouri Division of Medical Services Web site: <http://www.dss.state.mo.us/dms/pages/organization.htm>.

<sup>3</sup> *DMS: Division of Medical Services*. (n.d.). Retrieved September 5, 2002, from Missouri Division of Medical Services Web site: <http://www.dss.state.mo.us/dms/index.htm>.

<sup>4</sup> State of Missouri Division of Purchasing and Materials Management. (June 10, 2002). *Medicaid Managed Care - Eastern and Central Region*. Draft RFP No. B3Z02226. Req#: NR 886 25752010655 & NR 886 25752010656.

State, to serve MC+ Recipients. The most recent draft RFP was issued on June 10, 2002 for the Central and Eastern Regions of the State.

DMS has developed several methods of facilitating communication among the federal government, State, health plans, providers and members, including the formation of standing groups and special task forces; the development of a standard self-assessment protocol to ensure health plan compliance with State contractual and Federal regulations; and outreach/enrollment of eligible beneficiaries into the MC+ program.

## Quality Monitoring and Oversight

MC+ Health Plans are required to initiate and maintain a quality monitoring and oversight program in compliance with the DMS Quality Assurance and Improvement Plan. Each MC+ Health Plan must have their own Quality Assessment and Improvement Plan that includes, at a minimum, QA&I reports, and participation in annual State and External Quality Reviews.

### Quality Assurance & Improvement Reports

There are three types of QA & I reports that Health Plans must complete and forwarded to the State. They are the quarterly reports of complaints, grievances, and appeals; the HEDIS/CAHPS Report; and the annual evaluation of the Health Plan QA & I Program. The quarterly reports are to be sent to DMS according to the schedule specified in the State Quality Management Plan. Data are employed by DMS for quality improvement and External Quality Review.

The required data elements to be provided to the State include:

- Date of the complaint;
- Member DCN (Departmental Control Number);
- A description of the complaint;
- A description of the resolution of the complaint;
- Provider identification number; and
- Complaint resolution date.

The information required for grievances or appeals includes:

- Date that the member/provider disagreed with the resolution to the complaint process;
- Member DCN;
- Specific description of the issue;
- Resolution description (to answer the following questions);
- Provider identification number; and
- Date of issue resolution<sup>5</sup>.

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<sup>5</sup> Missouri Department of Social Services, Division of Medical Services. (2002). *Managed Care Quality Assessment & Improvement Plan*. Revised June 13, 2002.

The annual evaluation of the Health Plan QA & I program must also be submitted to DMS according to the submission deadlines, and should be approved by the health plan's Board of Directors as well. The evaluation must include, at a minimum:

- Summary of quarterly complaints, grievances, and appeals data;
- Analysis of utilization and clinical performance data;
- A report on the monitoring of 24-hour access;
- Evaluation of plan-determined sentinel events (i.e., unusual occurrences);
- Evaluation/analysis of all of the required MC+ Quality Indicators;
- Summary of internally identified quality issues/actions;
- Documentation of monitoring/follow up on action items (as listed in the Plans' quality committee meeting minutes); and
- Focus study information (trends identified for study, results of studies, any corrective actions needed, and the outcome of these actions, if any).

#### State Review

In addition to the submission of these reports, the State conducts annual reviews of all of the health plans participating in the MC+ Managed Care Program. On-site reviews are designed to concentrate on the internal processes and policies/procedures of the health plans. They include a readiness review of newly contracted health plans and targeted reviews to focus on any areas of concern. To help the health plans prepare for these on-site reviews, the State has developed a self-assessment protocol which covers the processes/policies and procedures that are in place for the following areas, as required in their contract with the State:

- Provider Network
- Provider Relations
- Member Services
- Complaints, Grievances, and Appeals
- Quality Assessment and Improvement
- Utilization Management
- Records Management
- Information Systems
- Mental Health

The goal of these reviews is to support each one of the health plans in their efforts in quality improvement and the provision of health care to MC+ Managed Care Members; provide technical assistance; identify clinical practice guidelines, ensure prevention of health problems, prevent negative outcomes and ensure contract compliance. Mental health reviews are performed by the Department of Mental Health (DMH) with the assistance of DMS. The on-site reviews evaluate a variety of clinical and utilization data and may include:

- Review of credentialing and re-credentialing processes for plan network providers;
- Review of external accreditation preparation and results;

- Review of documentation in support of outreach activities and ongoing provider education activities;
- Results and supporting material relating to HEDIS performance measures, focused studies, and medical chart audits/reviews;
- Follow up of findings identified during previous reviews;
- Review of the internal quality, utilization, information and records management program;
- Case management records;
- Contract compliance issues; and
- Visits to a sample of provider site locations<sup>6</sup>.

Member satisfaction survey results are also a part of quality monitoring. The Department of Health and Senior Services (DHSS) has the authority to collect member satisfaction survey data from all managed care plans. Consequently, the health plans must use the survey instrument specified by DHSS and submit the data from surveys to DHSS, using the Consumer Assessment of Health Plans Survey (CAHPS) as collected by a certified vendor. In order to ensure consistency, DMS uses the results as reported to the DHSS.

#### External Quality Review

The final section of the DMS Quality Monitoring and Oversight Plan refers to the External Quality Review, which is conducted annually by an independent Peer Review Organization (PRO) or PRO-Like Entity. Reviewers evaluate the delivery of health care and validate encounter data through multiple methods, including medical chart reviews, secondary data analysis, administrative reviews, document reviews, focused studies, and health plan case management file reviews. The External Quality Review Organization (EQRO) conducts site visits and holds an exit conference; requests recommendations for focused studies; provides a written summary of findings and recommendations; and presents a summary report to the MC+ Quality Assessment and Improvement Advisory Group.

#### Quality Assessment and Improvement Advisory Group

The Quality Assessment and Improvement Advisory Group (QA & I) was formed by the Missouri Division of Medical Services (DMS) as a statewide advisory group of the MC+ Managed Care Program. The Advisory Group was formed as a part of the Missouri Department of Social Services, Division of Medical Services Quality Assurance and Improvement Plan. The mission, purpose, goal, and overview of this plan are as follows:

##### **Mission**

To maintain or improve the quality of life for people in the state of Missouri by providing the best possible services to the public, with respect, responsiveness, and accountability which will enable individuals and families to better fulfill their potential.

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<sup>6</sup> Missouri Department of Social Services, Division of Medical Services. (2002). *Managed Care Quality Assessment & Improvement Plan*. Revised June 13, 2002.

### Purpose

The Department of Social Services, Division of Medical Services seeks to assure access and availability of high quality health care services for MC Plus Managed Care members through development of service delivery systems, standards setting and enforcement, and education of providers and recipients.

### Goal

The goal is to ensure that:

- High quality health care services are provided to managed care members.
- MCOs are in compliance with Federal, State, and contract requirements.
- A collaborative process is maintained to collegially work with the MCOs to improve care.

### Overview of Standards for Performance

The MCOs must meet program standards for monitoring and evaluation of systems as outlined in the managed care contract, Federal and State regulations. The MCO must monitor, evaluate, and implement processes to ensure:

- Quality management;
- Utilization management;
- Records management;
- Information management;
- Care management;
- Member services;
- Provider services;
- Organizational structure;
- Appropriately credentialed personnel;
- Network performance;
- Access and availability; and
- Data collection, analysis and reporting<sup>7</sup>.

The DMS QA & I Advisory Group meets quarterly, typically in Jefferson City, Missouri. The Chair of the Group is Dr. Gregg Laiben, of the Missouri Patient Care Review Foundation. The Group includes employees of the health plans, employees of various state agencies, consumer advocates, and representatives of provider groups (e.g., Missouri Hospital Association and Missouri Dental Association). Reports from the Consumer Advisory Group and QA&I subgroups (Dental, Maternal/Child Health, Mental Health, Pharmacy, and Medical Directors) are presented as well as a review of pending issues (e.g., complaints, grievances, and appeals information, EQRO reports, credentialing, and updates on performance measures).

The QA&I Advisory Group and its subgroups have addressed a number of quality improvement issues in 2001, including:

- A standardized EPSDT form, to help increase EPSDT documentation<sup>8</sup>
- Region-specific Child Abuse Resource Guides

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<sup>7</sup> Missouri Department of Social Services, Division of Medical Services. (2002). *Managed Care Quality Assessment & Improvement Plan*. Revised June 13, 2002.

<sup>8</sup> MC+ Quality Assessment and Improvement Advisory Group. (2001). *Meeting Minutes: September 20*.

- Reporting of MC+ Mental Health Utilization and Penetration Rates, by MCO<sup>9</sup>
- MCH “Best Practices” initiative
- Inter-agency discussion groups on barriers to lead screening in the St. Louis area
- Improvements in Care/Case/Disease Management
- ADA Dental code expansion
- Development of protocols for coordination of counseling and substance abuse services with DMH providers

In addition to this statewide QA & I Advisory group, each MC+ Health Plan must have their own QA & I Group/plan and an employee designated as a coordinator for the plan. This coordinator usually represents the health plan on the QA & I Advisory Group. By combining the efforts of the QA & I Advisory Group with those of the individual Health Plans, the access and availability of high quality health care afforded to MC+ members can be closely monitored and improvement efforts coordinated.

## MC+ Eligibility

MC+ is the Medical Assistance Program (MAP) for low income pregnant women, children, and uninsured parents in the State of Missouri. Recipients of the MC+ Program receive their health care via fee-for-service or managed care payment mechanisms (MC+ Managed Care Members). The fee-for-service mechanism applies to recipients residing in all of the counties outside of the Eastern, Central, and Western managed care regions, and those whom a) opt out of managed care due to their disability status; or b) are in foster care. MC+ Managed Care Members choose their health plan and provider. If they do not choose one, they are automatically assigned to a provider and health plan, with the freedom to change health plans or providers.

### Eligibility

The aim of the MC+ Managed Care Program is to enroll eligible MC+ Managed Care Members into health plans under contract with the State to provide beneficiaries specific services in exchange for a capitated payment made on a per member, per month basis.

The MC+ Program eligibility groups include:

1. Parents/Caretakers, Children, Pregnant Women, and Refugees;
  - Parents/Caretakers and Children eligible under Medical Assistance for Families, and Transitional Medical Assistance
  - Children under MC+ for Poverty Level Children
  - Women eligible under Medical Assistance for Pregnant Women and 60 days post-partum
  - Individuals eligible under Beneficiaries of Refugee Medical Assistance

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<sup>9</sup> MC+ Quality Assessment and Improvement Advisory Group. (2002). *Meeting Minutes: March 20*.

- Individuals eligible under the above groups and whom are MRDD Waiver participants
  - Those that are eligible are defined by their MC+ Medical Eligibility (ME) Codes
2. Eligibility of Other MC+ Children In the Care and Custody of the State Receiving Adoption Subsidy Assistance;
  3. 1115 Demonstration Waiver – Uninsured Children Below 200 Percent Under Title XIX, coordinated with Title XXI Funding; and
  4. Medical Assistance for Families (MAF)–Transitional Adults for an Additional One Year Under Title XIX.

MC+ Managed Care Members may voluntarily disenroll from the MC+ Managed Care Program or choose not to enroll in the MC+ Managed Care Program if they meet the following criteria:

- Are eligible for Supplemental Security Income (SSI) under Title XVI of the Social Security Act;
- Are described in Section 501(a)(1)(D) of the Social Security Act;
- Are described in Section 1902(e)(3) of the Social Security Act;
- Are receiving foster care or adoption assistance under Part E of Title IV of the Social Security Act;
- Are in foster care or otherwise in out-of-home placement; or
- Meet the SSI disability definition as determined by the Department of Social Services.<sup>10</sup>

The MC+ Managed Care Members for Kids program consists of those who qualify for services under the 1115 Waiver eligibility criteria. The goal of this program is to provide health insurance to uninsured children and parents in the State of Missouri through the State Children's Health Insurance Program (SCHIP); which falls under the 1115 Waiver provision in Missouri. To qualify for this program, children must be under the age of 19; have a family income below the 300% Federal Poverty Level (FPL); be uninsured for six (6) months or more; and have no access to other health insurance coverage for less than \$290 per month. Depending on the level of income, families are subject to sharing the cost of services through premiums and/or co-payments for services (see Figure 1).

| Premium Chart for MC+ for Kids<br>July 1, 2001 |                         |                |
|--|-------------------------|----------------|
| Family Size                                    | Monthly Income          | Premium Amount |
| 1  | \$1,611.01 - \$1,790.00 | \$55.00        |
|  | \$1,790.01 - \$1,969.00 | \$64.00        |
|  | \$1,969.01 - \$2,148.00 | \$73.00        |
| 2  | \$2,177.01 - \$2,419.00 | \$83.00        |
|  | \$2,419.01 - \$2,661.00 | \$95.00        |
|  | \$2,661.01 - \$2,903.00 | \$108.00       |
| 3  | \$2,744.01 - \$3,048.00 | \$112.00       |
|  | \$3,048.01 - \$3,353.00 | \$127.00       |
|  | \$3,353.01 - \$3,658.00 | \$142.00       |
| 4  | \$3,310.01 - \$3,678.00 | \$140.00       |
|  | \$3,678.01 - \$4,045.00 | \$158.00       |
|  | \$4,045.01 - \$4,413.00 | \$177.00       |
| 5  | \$3,876.01 - \$4,307.00 | \$168.00       |
|  | \$4,307.01 - \$4,737.00 | \$190.00       |
|  | \$4,737.01 - \$5,168.00 | \$211.00       |
| 6  | \$4,442.01 - \$4,936.00 | \$197.00       |
|  | \$4,936.01 - \$5,923.00 | \$218.00       |
| 7 and above                                    | \$5,009.01 and above    | \$218.00       |

**Figure 1**

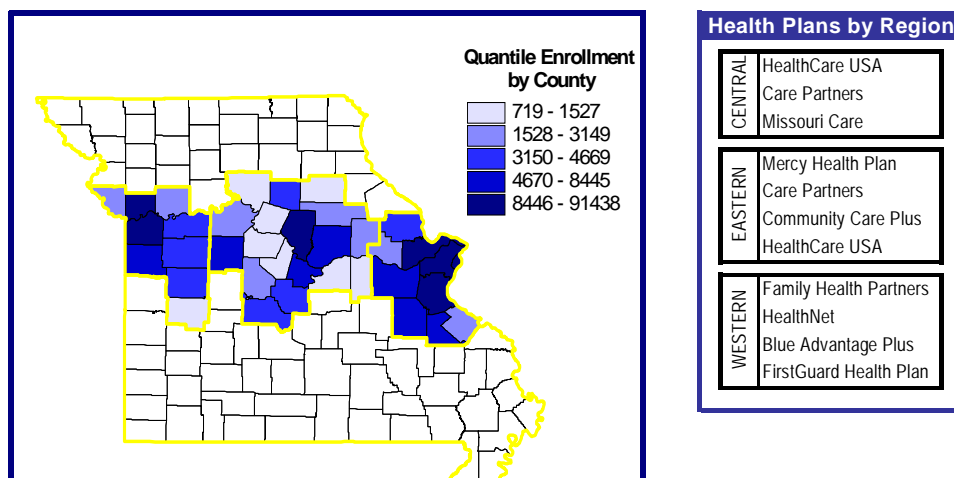
Source: MC+ For Kids More Information,  
[www.dss.state.mo.us/mcplus/premium.htm](http://www.dss.state.mo.us/mcplus/premium.htm)

<sup>10</sup> State of Missouri Division of Purchasing and Materials Management. (June 10, 2002). *Medicaid Managed Care–Eastern and Central Region*. Draft RFP No. B3Z02226. Req#: NR 886 25752010655 & NR 886 25752010656.



## Regions and Counties of Operation

On September 1, 1995, the State of Missouri implemented Medicaid managed care services (MC+) through a 1915(b) Freedom of Choice Waiver in five (5) counties in the Eastern Region of Missouri, located around the St. Louis area. On March 1, 1996, MC+ services were expanded to eighteen (18) counties in the Central Region of the State; and on January 1, 1997, the seven (7) counties that comprise the Western Region of the State (the Kansas City area), were included in the MC+ Program.<sup>11</sup> The MC+ Program has experienced significant growth and changes since its implementation in 1995, including expansion in the three previously mentioned regions, and the addition and consequent elimination of the Northwestern Region from managed care. As of December 31, 2001 the total enrollment in the MC+ Program was 395,868, increased from 339,799 (16.5%) on December 31, 2000. Total county-level enrollment data are displayed in Figure 2. The map also outlines the three MC+ Managed Care Regions. HealthCare USA had the largest market share of MC+ Managed Care Members among all of the health plans in 2000 and 2001 (see Table C1, Figures 3 and 4). The market share distribution among MC+ Health Plans has remained relatively stable across Health Plans and regions.

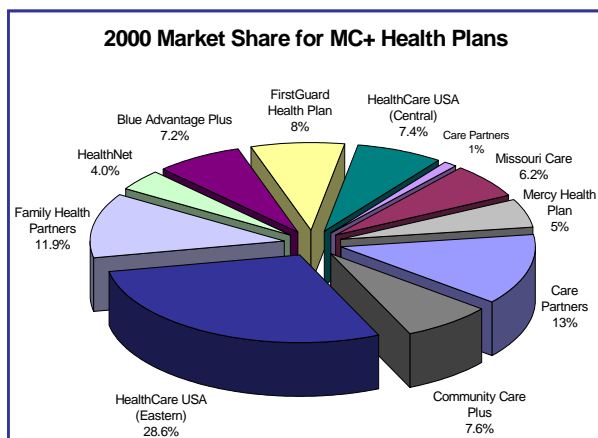


**Figure 2**

Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen

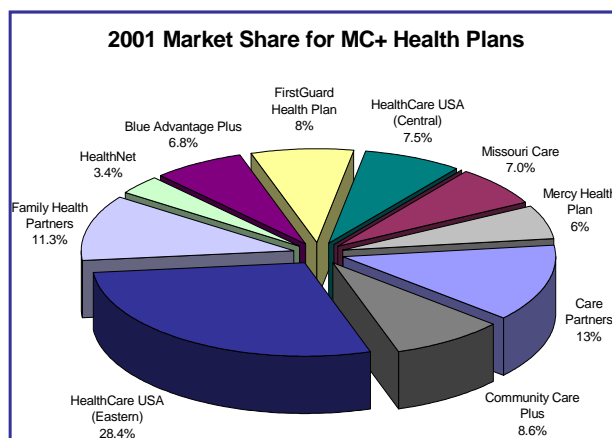
Notes: Enrollment data is as of December 31. Enrollment totals do not include enrollees with a future stop date.

<sup>11</sup> Missouri Patient Care Review Foundation. (1999). *External Quality Review of MC+ Managed Care in Missouri: Calendar Year 1998*.

**Figure 3**

Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen

Notes: Enrollment data is as of December 31. Enrollment totals include enrollees with a future start date. Enrollment totals do not include enrollees with a future stop date.

**Figure 4**

Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen.

Notes: Enrollment data is as of December 31. Enrollment totals do not include enrollees with a future stop date. 2000 was Care Partners last complete year of operation in the Central Region.

### Eastern Region

The implementation of the MC+ Managed Care in the Eastern Region was initiated on September 1, 1995 (Franklin, Jefferson, St. Charles, St. Louis City, and St. Louis Counties). Five counties were added to the St. Louis Region in late 2000 (Lincoln, St. Francois, Ste. Genevieve, Warren, and Washington Counties).<sup>12</sup> MC+ Health Plans serving the Eastern Region in 2001 included Mercy Health Plans, Care Partners, Community Care Plus, and HealthCare USA. As of December 31, 2001 the Eastern Region had a total enrollment of 222,142 members (56.1% of MC+ Managed Care Members statewide). Of these, 90.6% of them were 1915(b) Members, and the remainder consisted of MC+ for Kids (8.8%), and Uninsured Parents (.7%). The majority of members in the Eastern Region were enrolled with HealthCare USA (50.5%), followed by Care Partners (23.7%), Community Care Plus (15.4%), and Mercy Health Plans (10.4%)<sup>13</sup>.

### Central Region

The second region added to the MC+ program was the Central Region, implemented March 1, 1996. The eighteen (18) Central Region counties covered are Audrain, Boone, Callaway, Camden, Chariton, Cole, Cooper, Gasconade, Howard, Miller, Moniteau, Monroe, Montgomery, Morgan, Osage, Pettis, Randolph, and Saline Counties. HealthCare USA and Missouri Care served the Central Region in 2001, and Care Partners exited this region in January 2001. According to the State of Missouri Medicaid Enrollment Summary, as of December 31, 2001, the Central Region had 57,458 total MC+ Managed Care Members, accounting for 14.5% of Members statewide. The distribution of Members in the Central Region consisted primarily of 1915(b)

<sup>12</sup> DMS Organization (n.d.). Retrieved September 5, 2002 from Missouri Division of Medical Services web site: <http://www.dss.state.mo.us/dms/pages/description.htm>

<sup>13</sup> Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen. (2002). *Missouri Medicaid: MC+ Enrollment Summary (as of December 31, 2001)*.

members (86.0%), followed by those in the MC+ for Kids program (13.4%), and Uninsured Parents (0.7%). HealthCare USA had the majority of Central Region members in their plan (51.6%), with the remaining enrolled in Missouri Care (48.4%)<sup>14</sup>.

### Western Region

The implementation of the Western Region occurred on January 1, 1997<sup>15</sup>. The counties covered in the Western Region include Jackson, Platte, Clay, Ray, Lafayette, Johnson, and Cass. Henry and St. Clair Counties were added to the Western Region after initial implementation. The Health Plans operating in the Western Region in 2001 included Family Health Partners, Blue Advantage Plus, and FirstGuard Health Plan. HealthNet exited the Western Region in 2001. While the enrollment was not as large as the Eastern Region, the Western Region had approximately twice as many Members enrolled as the Central Region, with 116,268 Members as of December 31, 2001, accounting for 29.4% of Members statewide. The majority of MC+ Members were from the 1915(b) population (87.5%), followed by MC+ for Kids (12.0%), and Uninsured Parents (0.5%). In 2001, the market leader in the Western Region was Family Health Partners (38.6%), followed by FirstGuard Health Plan (26.34%), Blue Advantage Plus (23.3%), and HealthNet (11.7%)<sup>16</sup>.

## Program Implementation

### Administrative Interviews and Document Reviews

To obtain background information on recent changes in the MC+ Program and the process of quality monitoring, a number of personnel from the Division of Medical Services as well as other State agencies and advocacy groups were interviewed. Also, as part of the site visits, MC+ Plan Administrators and Health Plan staff were interviewed regarding the processes of implementation. Finally, a number of documents (minutes from meetings and task forces, State contracts with health plans, self-assessment protocols, health plan self-assessment responses, and DMS recommendations to health plans) were reviewed.

There have been some changes in structure for the Division with the re-organization of the Quality Services section. There were some concerns expressed about the implementation of the final rules for Medicaid Managed Care being issued, which are to be implemented by August 2003; and the development of contracts and processes pending changes. One change is a move toward a two-step complaint process modeled after Medicare regulations, with grievances related to the quality of care or operations, and appeals for denials, reductions, or the

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<sup>14</sup> Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen. (2002). *Missouri Medicaid: MC+ Enrollment Summary (as of December 31, 2001)*.

<sup>15</sup> [Http://www.dss.state.mo.us/dms/pages/description.htm](http://www.dss.state.mo.us/dms/pages/description.htm)

<sup>16</sup> Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen. (2002). *Missouri Medicaid: MC+ Enrollment Summary (as of December 31, 2001)*.

termination of services. In addition, there have been some concerns in the Eastern Region with the process for notification of members and due process considerations.

### Quality Improvement

One change in quality assessment was the transition from paper-based to web-based submission of the self-assessment materials for reviewing compliance with the DMS contract. The web page is currently under development, but there has been an increased reliance on electronic, rather than paper-based storage and retrieval of health plan documents. There has been concern reported by Health Plans about the intrusive nature of multiple reviews for their own accreditation purposes, their Medicare product lines, the Division of Medical Services, and the External Quality Review as well as the timeliness of feedback for quality improvement purposes. For that reason, the EQR site visits were scheduled at the convenience of Health Plans to minimize interruption with Medicare and accreditation site visits (e.g., NCQA). Also, secondary data were obtained from other State agencies and the Division of Medical Services to maximize half-day site visits for the External Quality Review Organization. There were no additional “self-assessments” requested by the EQRO and at the request of health plans, medical records were obtained directly from providers rather than the Health Plans. Finally, providers were reimbursed for the submission of specific portions of the medical records. There were some concerns about privacy raised by health plans when identifying information for MC+ Managed Care Members regarding patients was requested.

### Fraud and Abuse

The Medicaid Fraud and Abuse Technical Advisory Group (TAG) was very active in the past year, reviewing all compliance plans for the health plans and developing a more uniform format for Health Plan implementation. The Division of Medical Services developed a checklist based on the Medicaid Fraud Guide for use in reviewing compliance plans submitted by the health plans. Policies for pharmacy abuse by providers and members, procedures for locking-in members and providers, and methods of examining utilization trends to detect abuse have been implemented. The abuse of Oxycontin was a particular concern in the Eastern Region, resulting in health plans locking-in members and providers. In addition, the Surveillance and Utilization Review Section (SURS; which reviews fee-for-service fraud and abuse) has been used to identify and communicate to health plans the names of providers who have been sanctioned for fee-for-service abuse billing issues. Also provided by DMS are the names of individuals who have been terminated from providing services on a federal level. Finally, DMS is directly linked with the on-line database for the Board of Healing Arts, for identification of providers who may have lost their credentials and communication information to health plans. Representatives from the Fraud and Abuse TAG from the Medicaid Investigative Unit (MIU) the Attorney General’s Office, the Medicaid/Fraud and Control Unit (MFCU), and the Compliance Officers of all the health plans

were represented on the Fraud and Abuse TAG. The Division will be requiring quarterly and annual reporting of fraud and abuse to be submitted with complaints and grievances.

### Service Delivery

Another improvement in State level administration is the increased coordination of State agencies to meet the needs of MC+ Managed Care Members. This included the education of DFS workers and a published manual for DFS workers to facilitate linking TANF beneficiaries with health and behavioral health services through the managed care plans. Also, local public health agencies, schools, and DFS offices appear to increasingly understand the need to coordinate services. It is reported that health plans as a whole have also improved the coordination of services, especially with families of children in out-of-home placements for behavioral health services. This is partially attributed to the increased stability of health plan staff and an increased knowledge base and comfort with the administration of MC+.

One concern on the part of the State agencies involved in meeting the needs of MC+ Members is with the level and quality of services provided through case management, especially for those children for whom behavioral health services are carved-out of the managed care capitation rate (children in foster care, receiving adoption subsidies, or those who are in the custody of the Division of Youth Services). For DMS, there is concern that health plans are not sufficiently identifying categorically needy children for medical case management or for mental health services; and that the case management is not sufficiently ensuring the development of treatment plans for coordinating and ensuring services. There was wide variation in health plan understanding of special needs of these children. For example, some health plans did not screen children in foster care or out-of-home services because their mental health services are carved-out. Thus, there was no opportunity to identify health care needs or needs for coordination of care. Some barriers identified with the ability to document care and provide services to children with special health care needs (CSHCN) include the heterogeneity of the special health care needs of children (e.g., mental health diagnoses, sickle cell, asthma, lead toxicity); the fact that some children may have had care documented through other state systems when they were placed in some alternative care situations (e.g., Division of Youth Services), and that foster parents are concerned about the confidentiality and protection of the children in their homes.

Health Plans continue to struggle with the measurement of EPSDT services related to incomplete documentation of services in medical records. Since plan reimbursement rates are tied to submitted claims, there is a need to assure all services have been captured for reporting. The standard EPSDT form was implemented in 2002, with statewide education and on-line access for providers. Health plan representatives have expressed concern about the measurement of EPSDT services and the reimbursement rates being based on the rate of EPSDT as measured by

the HCFA-416 data submissions, given that they reported being unable to replicate the reported rates. Positive efforts have been made by the State and Health Plans to improve the level of dental care to MC+ Members.

An index of the increased coordination among State agencies and of the support/technical assistance role of the State with Health Plans is the implementation of reports from public health agencies to the health plans regarding the results of blood lead level tests for all Members. This should increase the ability of health plans to document the rate of blood lead screening, communicate it to providers, and conduct lead case management and follow-up for members.

#### Maternal and Child Health

The Maternal and Child Health Subgroup developed 18 quality indicators with baseline comparison figures from 1995, for assessment of member health status. This information is gathered on a quarterly basis and provided by the Missouri Department of Health and Senior Services (DHSS). The DHSS also maintains immunization registries for public health clinics, including the Clinic Assessment Software Application (CASA, Centers for Disease Control), and the Missouri Health Strategic Architectures & Information Cooperative (MOHSAIC). There were concerns raised by members of the group that these registries were not consistently capturing immunizations administered and that they were not being well documented by the public health agencies. A number of health plans have worked with the local public health agencies in attempting to capture the immunization data for their members from this database.

#### Dental Services

DMS staff reported that Health Plans are steadily improving in the reporting of services (i.e. encounter data) as well as seeking out alternative avenues for services such as school-based dental services and traveling dental clinics. The concern regarding dental care access is a national issue and one that has received the attention of the State legislature, with efforts focused on recruiting more dentists as MC+ providers in Missouri and allowing schools to bill for Medicaid services provided in the schools. A quality initiative undertaken at the administrative level was the process of reviewing all dental codes within the system to reduce administrative burden and increase claims processes for dental services. Health plans have made concerted efforts at improving dental health provider networks and access to care through corrective action plans with existing contractors, the use of school-based dental providers, and the changing of dental provider networks or vendors entirely. One policy change that seems to have been helpful is the provision that hygienists are able to perform more procedures, thus increasing the potential access to dental service. The Dental Subgroup planned to use a billing code for members who did not keep appointments (DNKA) so that providers could at least document the extent of the problems reported with members not keeping appointments. Given concerns about the impact of the Health Insurance Portability and Accountability Act (HIPAA), the cost of

implementing the process, and the likelihood that providers may not have the time to report such a code, it was determined that the information provided would not be useful in improving the quality of services and access to members.

#### Mental Health Services

For behavioral health services, the Mental Health Subgroup of the Quality Assessment and Improvement Advisory Group has been very active over the last several years, with collaboration between the health plan behavioral health vendors and the Missouri Department of Mental Health. Data compiled by this group to examine behavioral health utilization and penetration rates for health plans have been included in this report. This group has worked with DFS staff to educate them on several issues: 1) how best to coordinate health plan and behavioral health services for children who may alternate being in and out of State custody; 2) the importance of identifying mental health providers who accept both fee-for-service and managed care mechanisms of payment and 3) the need to ensure continuity of care. The Advisory Group reports that as a result, there has been a 90% reduction in the use of Children's Treatment Service (CTS) funding through the Division of Family Services (DFS) for mental health care for children involved in the family services system. An MC+ Reference Guide has been developed, with plans to make it web-based and able to be updated. Guidelines and protocols for suicide prevention, coordination of care for children whose behavioral health services are carved-out, and residential service coordination between health plans and community mental health centers (CMHCs) have also been developed by the Groups.

# MC+ Health Plans

## Health Plan Structural Characteristics

Evaluation of quality of care is often described as having three components: structure, process, and outcomes. In this section, MC+ Health Plan structure and processes as they relate to the MC+ Program are discussed:

- Provider network and health plan exits and transitions.
- Membership characteristics of MC+ Managed Care Health Plans/Members.
- Service characteristics of MC+ Managed Care Health Plans.

## Health Plan Provider Network

### Background

One domain that is monitored by the State of Missouri for all licensed Health Maintenance Organizations (HMOs) in the State and for all MC+ Health Plans, is the provider network. This is done to ensure that health plans are able to provide an array of health care services within reasonable distance from members. The State of Missouri contract with MC+ Health Plans refers to the requirement of MC+ Health Plans to adhere to the distance standards set forth by the Missouri Department of Insurance (MDI), which governs and monitors the adequacy of provider networks for all licensed health plans in the State. In addition, the DMS monitors network adequacy and contractual adherence through a health plan self-assessment, State site visits, MDI assessment, and the External Quality Review (EQR) process.

Missouri State law (20 CSR 400-7.095) requires that 95% of all enrollees residing or working in a particular county have access to specified providers (primary and specialty care), facilities, and ancillary services. A rate lower than 95% would place the MCO out of compliance, unless an alternative to this standard is approved through the Department of Insurance.

Beginning in calendar year 2001, the Division of Medical Services began sharing a full-time staff member with the MDI to conduct the distance standard analysis of the MC+ Health Plans. This staff member evaluates and determines compliance of MC+ Health Plans with the MDI standards.

The Missouri Department of Insurance examines the network for primary care physicians, twenty nine (29) different specialty providers, eleven (11) different types of facilities, and six (6) different types of ancillary services for distance standard compliance. There are specific distance standards defined by specialty and type of geographic region (urban, basic, rural). Urban access counties are defined as counties with a population of 200,000 or more people; Basic access counties are counties with a population between 50,000 and 199,999 people; and



Rural access counties are counties with a population of fewer than fifty thousand 50,000 people<sup>1</sup>. Figure 5 shows the proportion of each geographic type, by region. As can be seen, the Central Region is characterized by rural populations; with the Eastern and Western Regions being primarily urban.

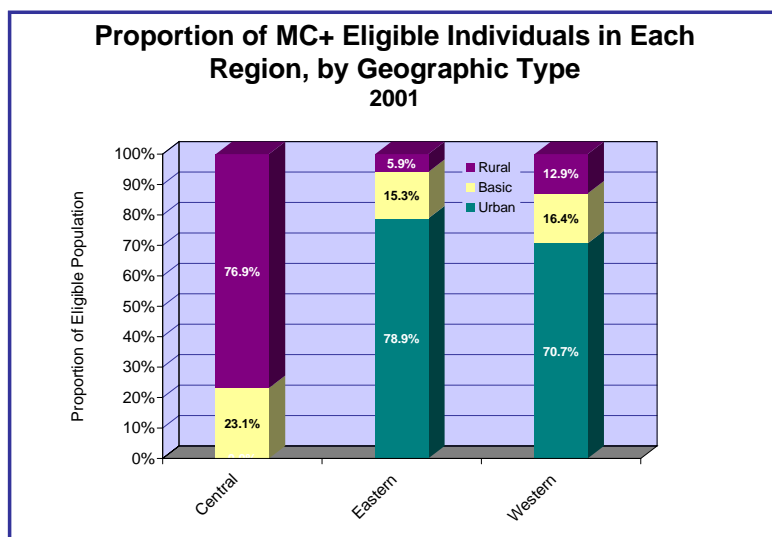
The adequacy of provider networks is conducted for the providers of each Health Plan using the total number of MC+ Members for the entire region, rather than the number of Members enrolled in each health plan. This is a conservative approach, ensuring provider accessibility based on the entire potential population of eligible MC+ Managed Care Members in the region served by each Health Plan.

### Regional Distance Standard Adequacy

This section provides a summary of the adequacy of provider networks according to the standards and final analyses

conducted by the Missouri Department of Insurance (MDI).

This analysis provides an overview of the availability of specific providers for MC+ eligible Managed Care Members in each Region. Review of the MDI Network Adequacy Analysis for 2001 revealed that the overall network adequacy ranged from 97.3% in both the Eastern and Western Regions, to 99% in the Central Region (see Table C2).



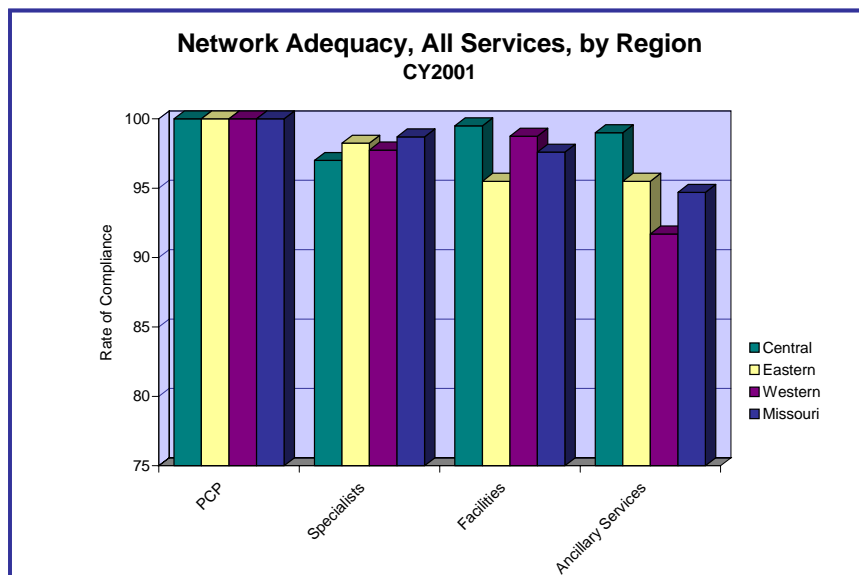
**Figure 5**

Source: Missouri Department of Insurance, 2001

The State's monitoring process for network adequacy involves annual monitoring of individual health plan network capacity for all MC+ Managed Care Members within a Region. This is a conservative approach, which ensures that if a health plan exits from MC+ Managed Care, the remaining Health Plan(s) will be able to serve the additional members. The State's criteria and process for evaluating network adequacy through distance standards is consistent with that for commercial and other publicly-funded HMOs in the State, making the requirements for MC+ Health Plans equivalent to those of commercial managed care.

<sup>1</sup> Missouri Department of Insurance (2001). Code of State Regulations: Rules of Department of Insurance, *Division 400–Life, Annuities and Health, Chapter 7–Health Maintenance Organizations*.  
[www.insurance.state.mo.us/industry/filings/mc/accessPlan.htm](http://www.insurance.state.mo.us/industry/filings/mc/accessPlan.htm)

On a regional, plan, and county level, network adequacy for primary care providers (PCP's) met distance standards at 100% sufficiency for each Region, according to the MDI distance standard analysis (see Figure 6). This indicates that there were enough primary care providers within a reasonable distance in each county, region, and plan to serve the full population of MC+ Managed Care Members.



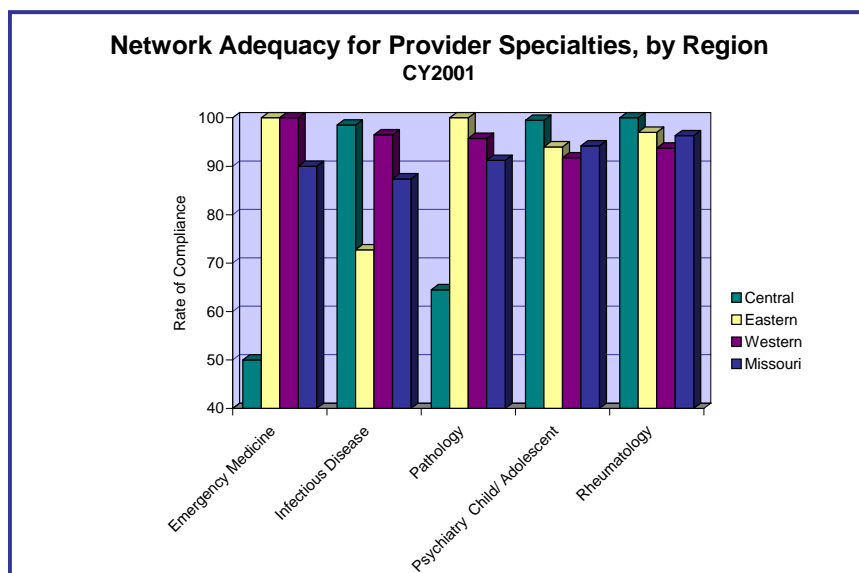
**Figure 6**

Source: Missouri Department of Insurance, 2001

Note: PCP = Primary care physicians

On a regional level, the MC+ program has enrolled a sufficient number of specialists and facilities to serve MC+ Managed Care Members within each of the regions. The only area below the 95% threshold was in ancillary services (overall 94.7%), with the Western Region being below threshold (91.75%; see Table C2).

For specialty care providers, five specialties fell below the 95% threshold for the State as a whole (see Figure 7 and Table C3). These included Emergency Medicine (90.0%; the Central Region was below threshold at 50.0%), Pathology (91.2%; the Central Region was at 64.5%), Infectious Disease (87.4%; the Eastern Region was at 72.8%), and Child/Adolescent Psychiatry (94.2%; both the Eastern and Western Regions were below 95%). Rheumatology fell below threshold (93.8%)

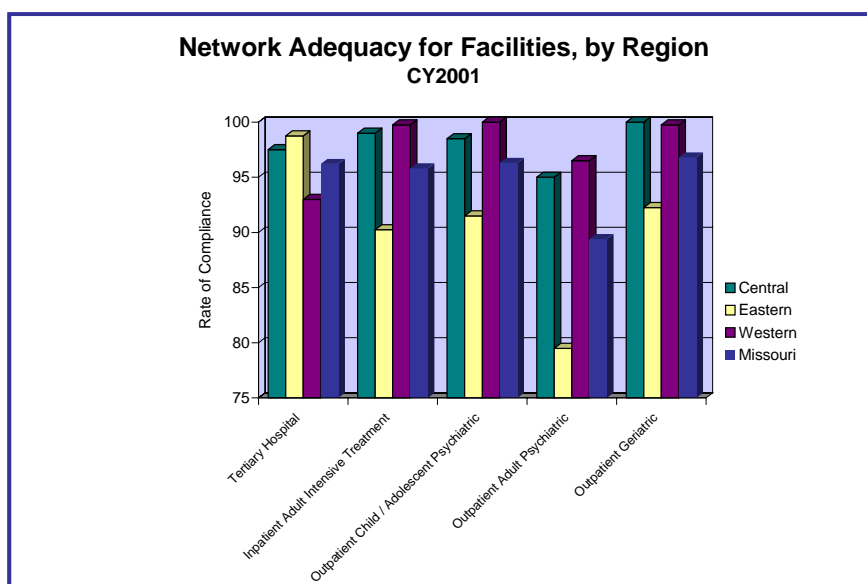


**Figure 7**

Source: Missouri Department of Insurance, 2001

in the Western Region only. When health plan staff were interviewed regarding the ability to maintain provider networks, the most often cited challenges were identifying and retaining dentists, child/adolescent psychiatrists, rheumatologists, and other pediatric subspecialists (e.g., pediatric dentists).

It is notable that with regard to the MDI distance standard analysis and criteria, there was an adequate number of general dentists to serve the MC+ population within each region. However, this does not include the subspecialty of pediatric dentistry.

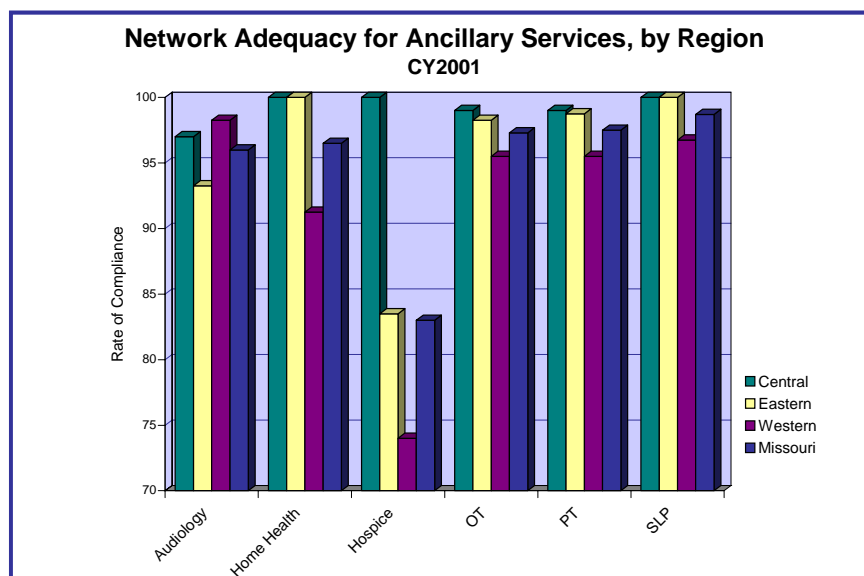


**Figure 8**

Source: Missouri Department of Insurance, 2001

Distance standards for facilities were generally adequate at the statewide level, with the exception of Outpatient Adult Psychiatric services (89.4%; see Table C4 and Figure 8). In the Central Region, all facilities met the minimum distance standards overall. In the Eastern Region, facility standards were below threshold for Inpatient Intensive Adult Psychiatric Services (90.3%), Outpatient Child and Adolescent Treatment (91.5%), Outpatient Adult Psychiatric Services (79.5%), and Outpatient Geriatric Services (92.3%). The Western Region was below threshold for Tertiary Care Hospitals (93.0%).

For ancillary services, (audiology, home health, occupational therapy, physical therapy, and speech/language pathology) the availability of hospice services fell below threshold (83.0%), with the Eastern (83.5%) and Western Regions (74.0%) below threshold in this area (see Figure 9 and Table C5).

**Figure 9**

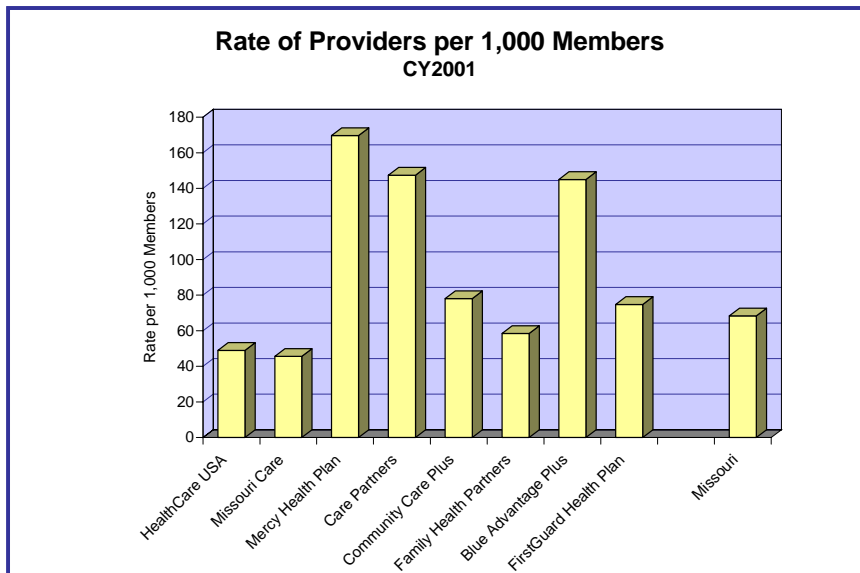
Source: Missouri Department of Insurance, 2001

Note: OT = Occupational Therapy; PT = Physical Therapy; SLP = Speech/Language Therapy

### Health Plan Provider Rates

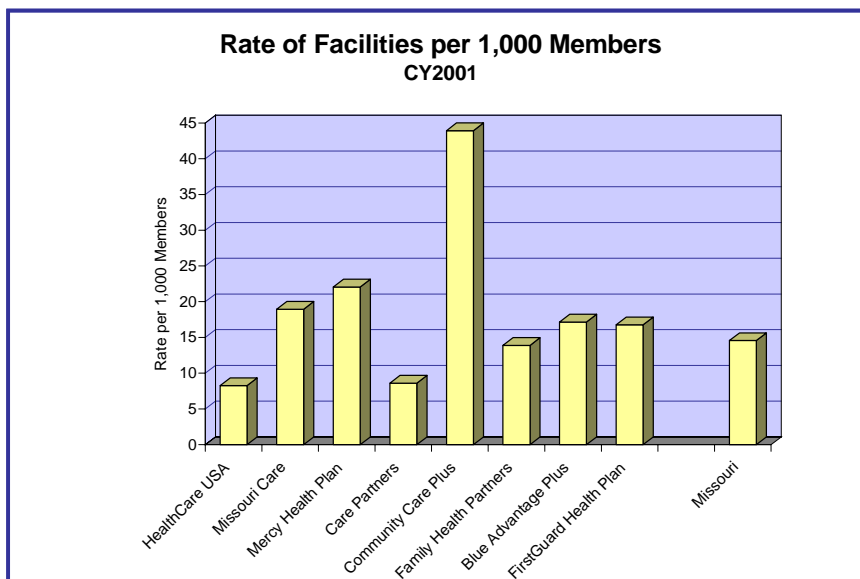
The DMS/MDI approach to assessing the provider network adequacy is very beneficial for examining the ability of the MC+ Managed Care Program to meet the needs of MC+ Managed Care members. Another approach to examining network capacity was used to supplement the MDI/DMS method of analysis. BHC, Inc. examined the rate of providers, facilities, and ancillary services for the number of MC+ Managed Care Members enrolled in each health plan (per 1,000 members), to provide a measure of individual health plan network capacity for the number of MC+ Managed Care Members enrolled in the respective plans. This method does not take into account the geographic accessibility of providers, nor the status of their panels (open or closed) with regard to accepting new MC+ Members. Given that data were reported by health plan and not separated by region, it was not possible to provide region-specific rates. Also, HealthNet did not submit a network analysis data for CY2001.

When examining the rate of providers based on the number of MC+ Managed Care Members enrolled, there was an overall rate of 68.31 providers per 1,000 members, with a range of 45.58 for HealthCare USA to 169.62 providers per 1,000 members for Mercy Health Plan (see Figure 10 and Tables C6 to C8).

**Figure 10**

Sources: Missouri Department of Insurance (2001). Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen, 2002.

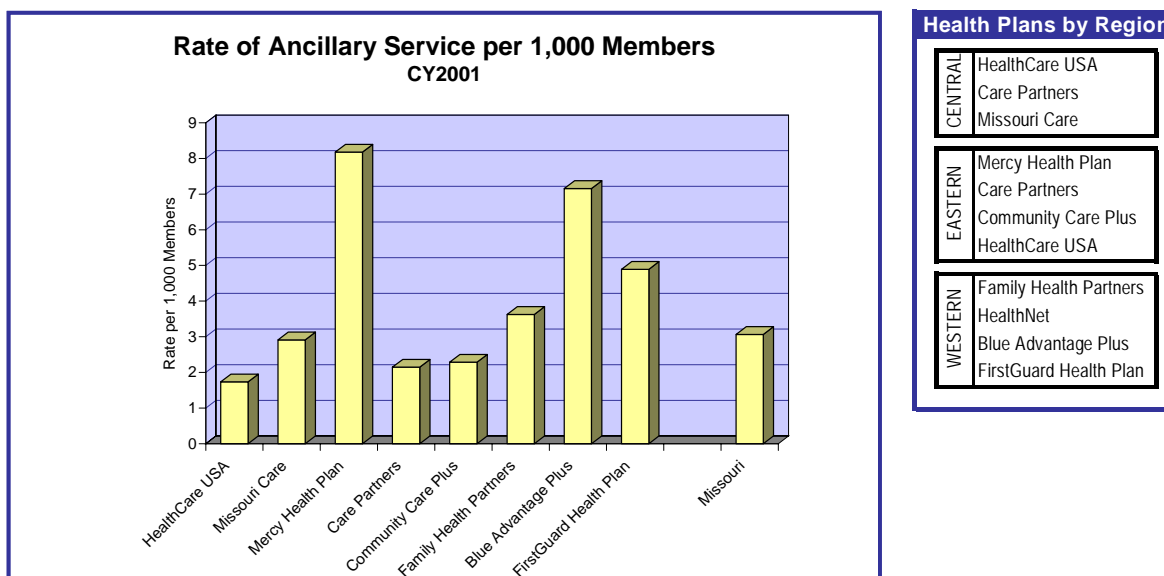
The overall rate of facilities per 1,000 members was 14.56 for Missouri, ranging from 8.26 for HealthCare USA, to 43.92 per 1,000 members for Community Care Plus. The overall rate per 1,000 members for ancillary services was 3.07 per 1,000 members, ranging from 1.73 for HealthCare USA, Central, to 8.18 for Mercy Health Plans (see Figures 11 and 12).

**Figure 11**

Sources: Missouri Department of Insurance (2001). Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen, 2002.

| Health Plans by Region |                        |
|------------------------|------------------------|
| CENTRAL                | HealthCare USA         |
|                        | Care Partners          |
|                        | Missouri Care          |
| EASTERN                | Mercy Health Plan      |
|                        | Care Partners          |
|                        | Community Care Plus    |
|                        | HealthCare USA         |
| WESTERN                | Family Health Partners |
|                        | HealthNet              |
|                        | Blue Advantage Plus    |
|                        | FirstGuard Health Plan |
|                        |                        |

| Health Plans by Region |                        |
|------------------------|------------------------|
| CENTRAL                | HealthCare USA         |
|                        | Care Partners          |
|                        | Missouri Care          |
| EASTERN                | Mercy Health Plan      |
|                        | Care Partners          |
|                        | Community Care Plus    |
|                        | HealthCare USA         |
| WESTERN                | Family Health Partners |
|                        | HealthNet              |
|                        | Blue Advantage Plus    |
|                        | FirstGuard Health Plan |
|                        |                        |

**Figure 12**

Sources: Missouri Department of Insurance (2001). Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen, 2002.

Distance standards for primary care providers were adequate across all regions, health plans, and counties, with enough providers in each region to ensure care without delays. One exception was for hospice services in the Western Region.

### Opportunities for Improvement

One of the limitations of both methods of provider network adequacy assessment is that they do not take into account whether providers are accepting new patients. A best practice recommended by the Center for Health Care Strategies, Inc.<sup>2</sup> is the review of data regarding the adequacy of standards based on whether panels are open, and how many patients providers will accept. Documentation and reports regarding the availability of providers should be reviewed at the time of site visits for each Health Plan, and provider referral processes as well as auto-assignment mechanisms should take into account whether a panel is closed.

## Health Plan Exits and Transitions

### Background

The Center for Health Care Strategies<sup>3</sup> (CHCS) published a toolkit outlining the reasons for withdrawal of health plans from Medicaid managed care, best practices for transitioning members, including those with special health care needs, and model processes/best practices for

<sup>2</sup> Felt-Lisk, S., Mittler, J. & Cassidy, A. (January 2001) *Informed Purchasing Series: Toolkit Ensuring Special Needs Populations' Access to Providers in Managed Care Networks: A Technical Assistance and Self-Assessment Tool for State Medicaid Agencies*, Center for Health Care Strategies (CHCS).

<sup>3</sup> Center for Health Care Strategies, Inc. (March 2001). *Transitioning Clients When Plans Exit Medicaid Managed Care Programs*, Informed Purchasing Series Toolkit.

transitioning members from a health plan exiting the market. Plans exit the Medicaid managed care arena for a number of reasons, including general financial considerations, administrative burden, asset transfer, corporate decisions to exit care from the State entirely, and other reasons.

For plans exiting Medicaid Managed Care, State administrative tasks include establishing deadlines, activities, and responsibilities for all parties; and making explicit the expectations of health plans during the transition process. Missouri's method of examining provider network adequacy (the ability of each health plan to meet distance standards for the entire eligible population in the Region) allows for the ability to assess the capacity of the remaining health plans to adequately serve additional members through the exit of health plans in the region.

For States, the goals of the transition process are to:

- Preserve the provider–client relationship;
- Specify exit and transition responsibilities in contracts;
- Hold plans responsible for materials and data;
- Notify clients;
- Notify providers;
- Notify the public and other stakeholders; and to
- Serve clients with special needs.

#### Health Plan Exits and Transitions

Between 1995 and 2000, there were a total of 81,700 members affected by plan exits in Missouri, compared to an average of 23,216 members affected across states. Plan exits between 1995 and 2000 for MC+ Managed Care were due to low capitation rates, asset transfer, and the plan exiting the State entirely. These reasons all represent voluntary plan exits for the seven plans that exited. None of the Missouri plans were reported to have exited due to administrative burden, and only two states (Iowa and Kansas) had health plans that exited for this reason. The State of Missouri Western Region contract specifies requirements of health plans transitioning members from services as a result of a health plan exit (see Figure 13).<sup>4</sup>

In 2001, two health plans exited MC+ Managed Care in Missouri, affecting approximately 3,801 members (7.6% of members) in the Central Region and 13,550 members (13.0% of members) in the Eastern Region. State administrative staff reported no concerns regarding the transition of members from both plans exiting in the Central and Eastern Regions, and reported that all

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<sup>4</sup> State of Missouri Division of Purchasing and Materials Management. (2001). *Medicaid Managed Care– Western Region*. Draft RFP No. B3Z02003. Req#: NR 886 25752001387. September 12, 2001.

**The State of Missouri Contractual Requirements for Health Plans Transitioning Members**

3.15.1 Upon expiration, termination, or cancellation of the contract, the health plan shall assist the state agency to insure an orderly transfer of responsibility and/or the continuity of those services required under the terms of the contract to an organization designated by the state agency, if requested in writing.

3.15.2 The health plan shall deliver, FOB destination, all records, documentation, reports, data, recommendations, master, or printing elements, etc., which were required to be produced under the terms of the contract to the state agency and/or to the state agency's designee within thirty (30) days after receipt of the written request.

3.15.3 The health plan shall continue providing any part or all of the services in accordance with the terms and conditions, requirements, and specifications of the contract for a period not to exceed 90 calendar days after the expiration, termination or cancellation date of the contract for a price not to exceed those prices set forth in the contract.

3.15.4 The health plan shall discontinue providing service or accepting new assignments under the terms of the contract, on the date specified by the state agency, in order to insure the completion of such service prior to the expiration of the contract.

**Figure 13**

*State of Missouri Division of Purchasing and Materials Management (2001). Medicaid Managed Care-Western Region Draft RFP, NO B3ZO2003 Reg. # NR 886 25752001 387. September 12, 2001.*

required documents were submitted to the State in a timely manner. Also, no concerns were noted by advocates or consumers during interviews and the focus group.

HealthNet, a Western Region provider, exited services to MC+ Managed Care Members entirely, while Care Partners exited services in the Central Region, both for voluntary reasons. HealthNet exited on January 01, 2001, notifying the Governor and the State Division of Medical Services. For HealthNet, provider medical and non-medical complaints increased during 2001, and were higher than the Region averages. However, utilization rates increased and were only slightly lower than the Region average, suggesting that members maintained adequate levels of access during the transition year. For Care Partners' Central Region, compliant and grievance data were submitted in aggregate form with Eastern Region rates, precluding analysis for the Central Region. The rate of total encounters per 1,000 members increased between 2000 and 2001, and was above average for the Central Region. This may indicate continued access to members during the final stages of transition in 2001, as well as expedited submission of encounter data.

**Best Practices**

The CHCS describes several "best practices" identified from reviewing State contracts and surveys conducted with State Medicaid officials for transitioning members and members with special health care needs out of plans.



**Best Practices for Health Plans Exiting Medicaid Managed Care<sup>5</sup>**

| <b>All Members</b>  | <b>Members with special health care needs</b>  |
|---|--|
| Require plans to give adequate notice to coordinate transitions and preserve provider-client relationships.   | Make more frequent and intense client notification efforts such as face-to-face contacts, with follow-ups.   |
| Develop organized and comprehensive transition plan.  | Use care coordinators and case managers to assess needs and transition clients individually.   |
| Include plan exit and client transition requirements in all contracts.  | Develop transition plans with specific tasks for special needs.  |
| Communicate with clients, providers, advocates, and other stakeholders frequently to assist with the timing, coordination, and monitoring of transitions. | Allow pregnant clients in their second or third trimesters to remain with their obstetricians through labor and delivery to maintain the continuity of the client's prenatal care. |

The Division of Medical Services is to be commended in implementing best practices in the assessment of provider network adequacy standards to determine the adequacy of other health plans in the Region to absorb members transitioned due to a plan exit; in requiring adequate notice of health plan exits to the public and officials; incorporating requirements into the contract; and monitoring the transition of members throughout the process.

**Opportunities for Improvement**

Although this process is implemented and monitored well, additional information may be useful in future monitoring of health plan transitions by:

- Assessing the rate of members who remained with their primary care providers prior to and following notification of transitioning;
- Assessing the rate of auto-assignment of members in the region prior to and following notification of the State of intent to withdraw;
- Assessing the rate of emergency room utilization prior to and following notification of the State;
- Obtaining advocate, provider, and stakeholder feedback through complaints and grievances (especially denial of claims and billing/authorization problems), State Fair Hearings, satisfaction surveys, advocacy groups, and focus groups; and
- Monitoring call center activity in the Regions in which members are transitioned, prior to and following the transition.

Evaluation of these rates at least one year prior to, and one year following the notification of plan exit, and relative to other plans in the same region would be important in assessing the success of Health Plan transitions and the associated impact on MC+ Members.

Finally, it is recommended that specific contractual language be added in the next contract cycle

<sup>5</sup> Center for Health Care Strategies, Inc. (March 2001). *Transitioning Clients When Plans Exit Medicaid Managed Care Programs*, Informed Purchasing Series Toolkit.

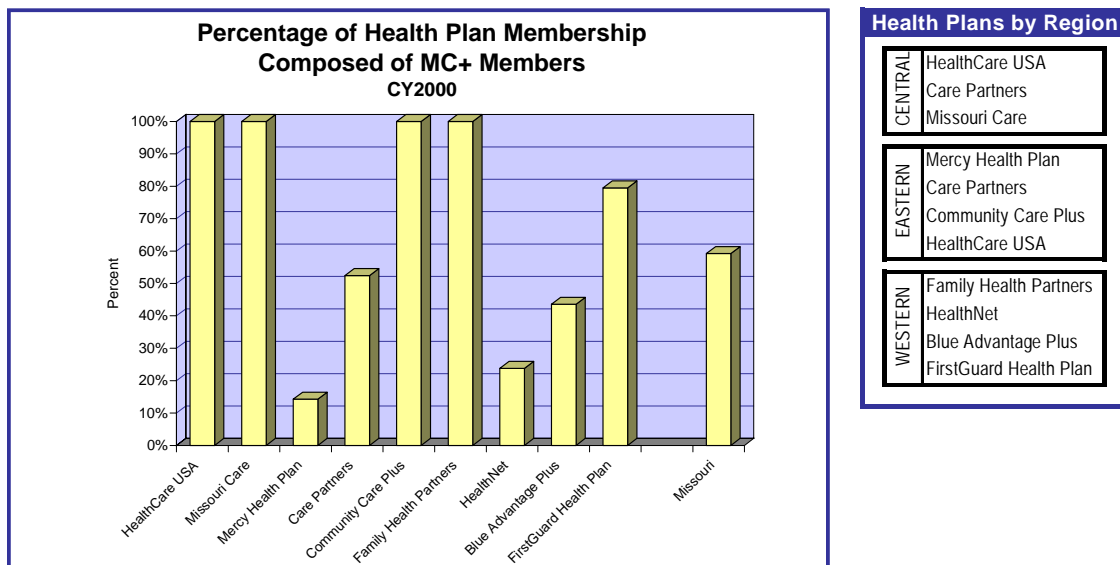
that specifically addresses the transition of care for Children with Special Health Care Needs, with instructions about the management of the transition of children in various categories of aid, such as those whom are disabled, placed outside of the home, or whom are involved in the MR/DD Waiver services, the Initiative for children with Serious Emotional Disturbance, and other community-based services. Additional contract language should also indicate the need for the health plan to ensure that vendor/provider contracts include the transition of services and monitoring of this transition. Additional contractual language that may be useful, based on prior years' experience with plan transitions may include specification of required elements, in addition to State approval of communications, for notification of members and providers.

# MC+ Members

## Proportion of Membership

The number of members enrolled in MC+ health plans as of the end of December 2001 was 395,868, representing a 16.5% increase in enrollment since the same time in 2000 (see Table C1). The increase in enrollment of MC+ beneficiaries in managed care was partly related to the implementation of the 1115 Waiver, which expanded Medicaid eligibility for those with incomes up to 300% FPL (a total of 164,596 as of August, 2001).

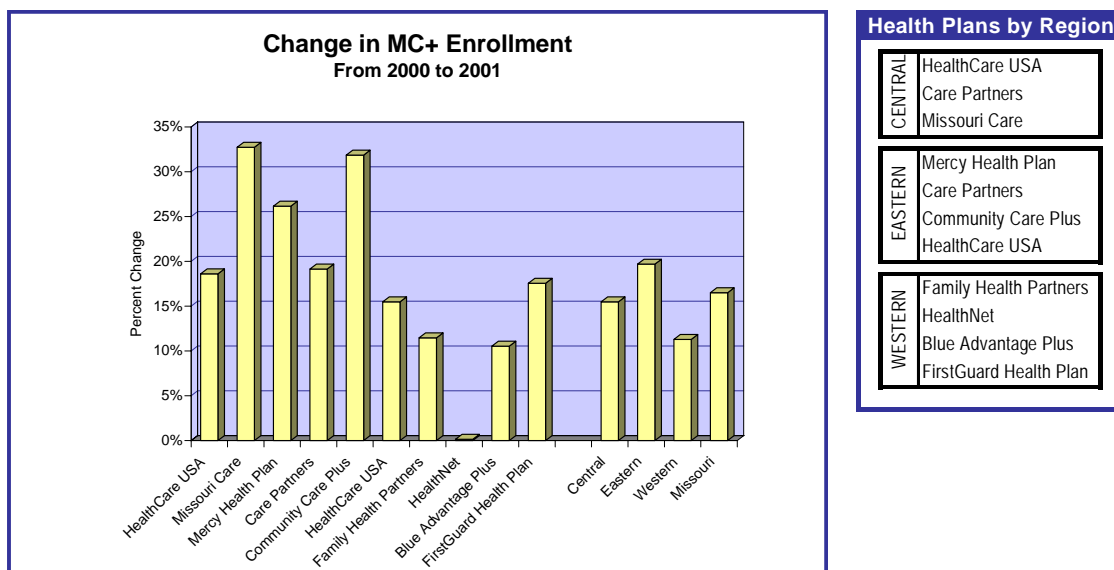
Four health plans served MC+ members exclusively, and spanned all three MC+ regions. These plans were Family Health Partners, Community Care Plus, Missouri Care, and HealthCare USA. Of those plans that also served commercial members, FirstGuard Health Plan served the largest proportion of MC+ Managed Care Members in 2000, with 79.5% of its membership consisting of MC+ Members. Mercy Health Plan served the smallest proportion of MC+ Members in 2000 (14.3%; see Figure 14 and Table C9).



**Figure 14**

Source: A Profile of Missouri's HMO's; Missouri Hospital Association, 2001 Edition

Notes: The information for health plans operating in more than one region was aggregated, and was not able to be separated by region.

**Figure 15**

Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen.

Notes: Enrollment data is as of December 31. Enrollment totals do not include enrollees with a future stop date.

Figure 15 illustrates the change in membership for each of the health plans, between 2000 and 2001. Missouri Care experienced the greatest increase in enrollment (32.7%, partially due to the exit of Care Partners from the Central Region), followed by Community Care Plus (31.9%) Mercy Health Plan (26.2%), and Blue Advantage Plus (10.5% increase), Family Health Partners (11.5% increase), FirstGuard Health Plan (17.6% increase), and had modest increases in MC+ enrollment. HealthCare USA experienced a 15.5% increase in the Eastern Region, and an 18.6% increase in the Central Region, while Care Partners had a 19.2% increase in the Eastern Region.

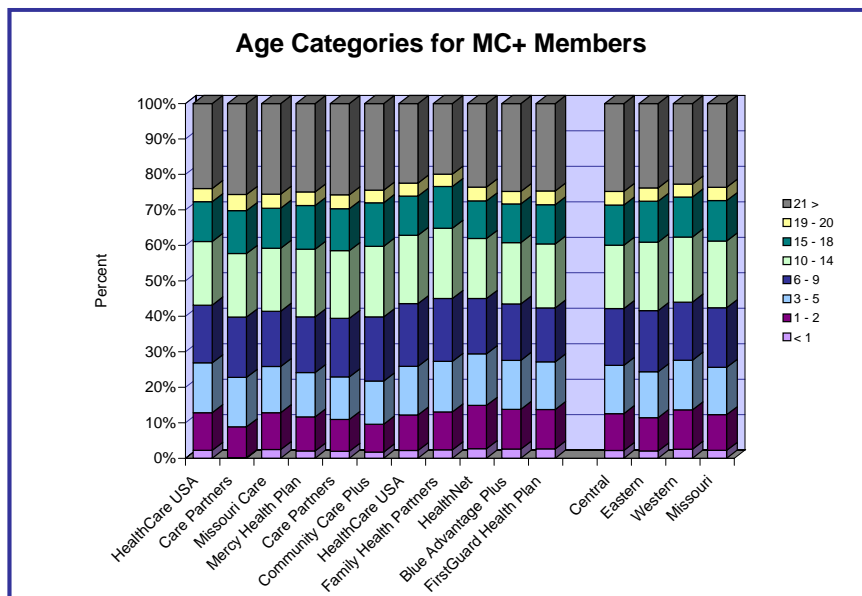
## Characteristics of Membership

Enrollment data from the Division of Medical Services were examined in order to obtain demographic information for MC+ Members. Data for Members active on June 30, 2001 (428,037 members) were summarized by health plan and region for Member demographic information (i.e., age, gender, and race).

### Age

The age of the members was divided into eight (8) different groups and this information was then summarized by Health Plan and Region (Figure 16). The distribution of age by MC+ Health Plan and Region was fairly consistent with the distribution for the State (see Table C10):

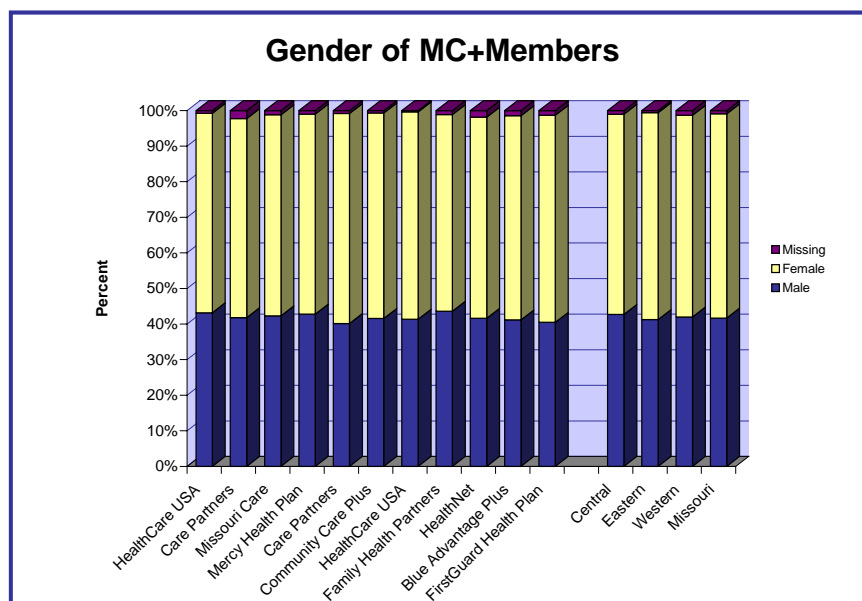
- Less than 1 year = 2.2%
- 1-2 years = 10.1%
- 3-5 years = 13.4%
- 6-9 years = 16.8%
- 10-14 years = 18.8%
- 15-18 years = 11.4%
- 19-20 years = 3.7%
- >21 years = 23.6%

**Figure 16**

Source: Missouri Department of Social Services, Eligibility and Enrollment Data, February 2002

**Gender**

Data on MC+ Managed Care Members (428,037) were also summarized by gender (Figure 17). As with the age distribution, the distribution of gender for individual health plans was fairly consistent with the State. Overall, 41.7% of MC+ Managed Care Members were male and 57.4% were female. Gender information was not complete in the database for .9% of the population (Table C11).

**Figure 17**

Source: Missouri Department of Social Services, Eligibility and Enrollment Data, February 2002

**Race**

The one demographic characteristic that was not similar across MC+ Health Plans and Regions was race (see Table C12, Figure 18). This characteristic was divided into four groups as indicated in the eligibility database:

- Caucasian
- African American
- Other (consisting of American Indian/Alaska Native, Asian, Multi-racial, Native Hawaiian/Pacific Islander, and Discontinued) and
- Unknown

The enrollment data received from the Division of Medical Services did not include Hispanic race

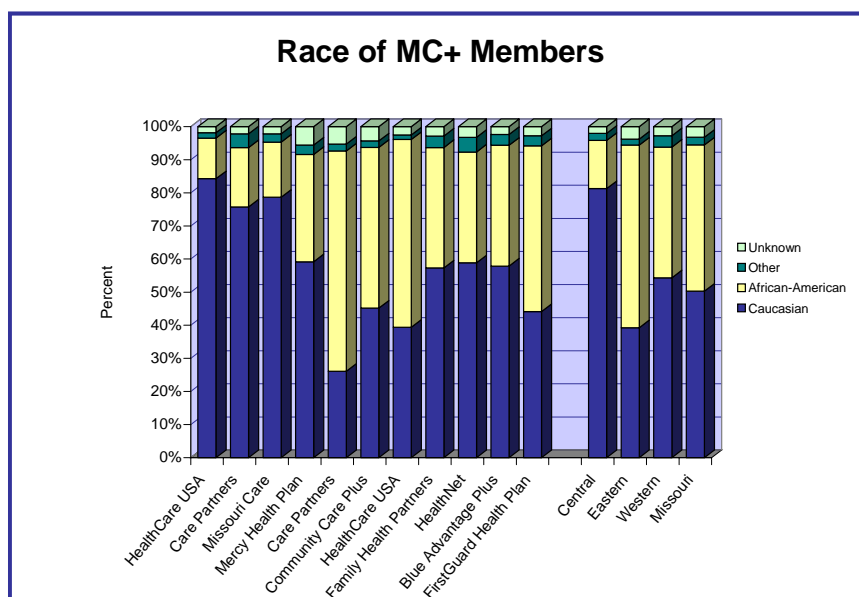
categories. The MC+

Managed Care population

was primarily Caucasian (50.3%), followed closely by African American (44.2%), with small proportions of Others (2.3%) and Unknown races (3.2%). The percentages for race, while comparable for plans in a certain region, varied depending upon the region and plan. Central Region members were more likely to be Caucasian (81.3%), followed by African American (14.6%), Other (2.2%), and Unknown (2.0%). In the Eastern Region, members were more likely to be African American (55.2%), followed by Caucasian (39.3%), Other (1.8%), and Unknown races (3.8%). The Western Region was primarily Caucasian (54.3%), followed closely by African American (39.5%), Other (3.4%), and Unknown races (2.7%; Table C15). The difference in the African American and Caucasian population by regions was the only noticeable difference in any of these demographic characteristics, but should be taken into consideration when examining regional variations in epidemiology of disease and cultural competency of health plans and providers. Further, it will be important to assess the role of ethnicity in health plan status, risk practices, and utilization.

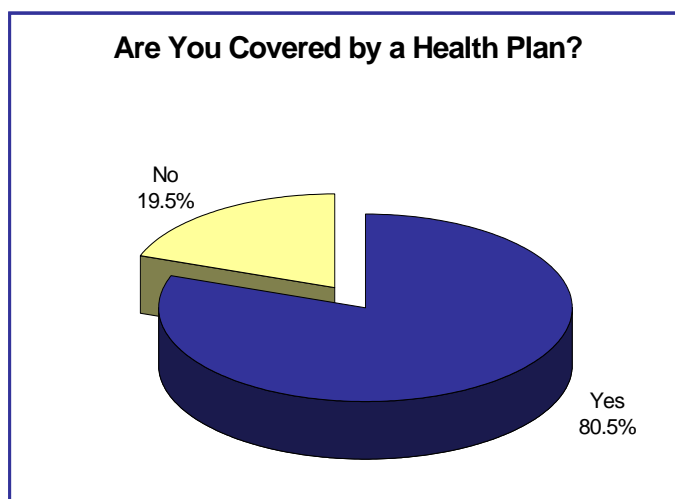
#### Member Enrollment

The Consumer Assessment of Health Plans Survey (CAHPS) was used to examine MC+ Managed Care Members' experiences with enrollment into MC+ Managed Care and their knowledge of MC+ Managed



**Figure 18**

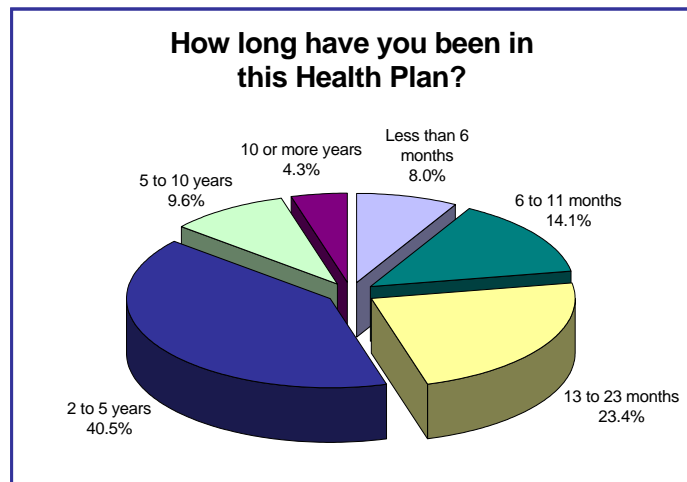
Source: Missouri Department of Social Services, Eligibility and Enrollment Data, February 2002



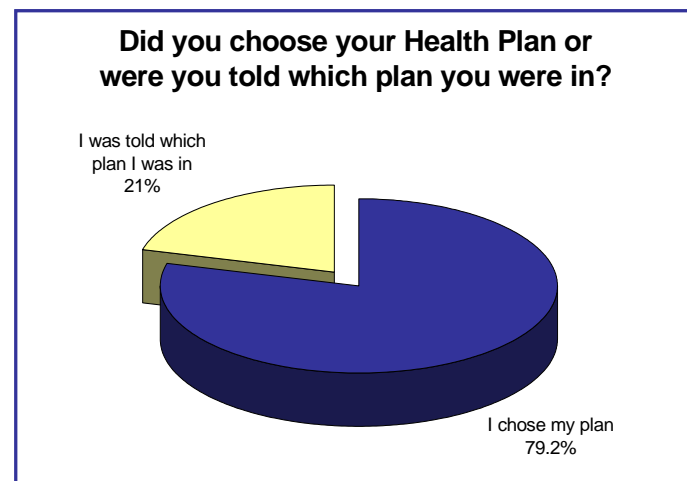
**Figure 19**

Source: Division of Medical Services, 2001 CAHPS Managed Care Survey, 2001

Care. Of those who responded to the CAHPS survey, 2,591 responded to the question about whether they were covered by a health plan. Over 80% (80.5%) reported that they were covered by a health plan (see Figure 19), and 19.5% were not aware that they were covered by a health plan. This suggests that there is a good proportion of the population that does not understand the significance of being enrolled in MC+ Managed Care. Nevertheless, most respondents indicated that they were enrolled with their current health plan from 2–5 years (40.5%), followed by those who reported they were enrolled with the same health plan from 13–23 months (23.4%; see Figure 20). This indicates that there does seem to be some continuity in health plan membership for MC+ Managed Care Members, although they may be changing eligibility categories and experiencing some breaks in enrollment as a result. Relatively few respondents reported having been enrolled in their current health plan less than six months (8.0%).

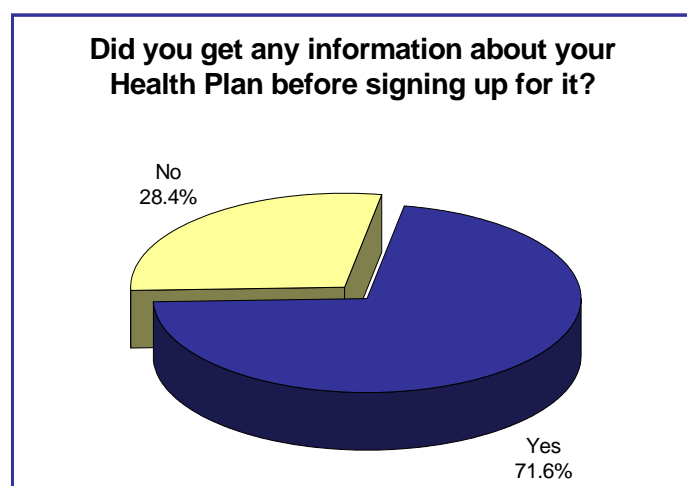
**Figure 20**

Source: Division of Medical Services, CAHPS Managed Care Survey, 2001

**Figure 21**

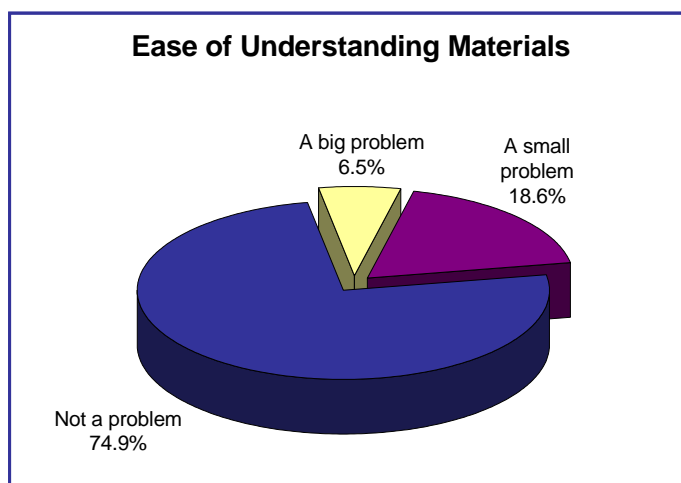
Source: Division of Medical Services, 2001 CAHPS Managed Care Survey, 2001

MC+ Managed Care Members, for the most part opted to choose their own health plan (79.2%) and 71.6% reported obtaining information about health plans before the time of enrollment (see Figures 21 and 22). Given that the membership enrollment materials and health plan manuals for MC+ Managed Care are relatively standardized, the ease of understanding health plan materials was examined using the CAHPS question asking respondents about the ability to

**Figure 22**

Source: Division of Medical Services, 2001 CAHPS Managed Care Survey, 2001

understand health plan materials. The greatest majority (74.9%) reported not having a problem with understanding health plan materials, but 6.5% reported having “a big problem” understanding materials (Figure 23). The CAHPS does not allow for identification of reasons for difficulty understanding health plan materials.



**Figure 23**

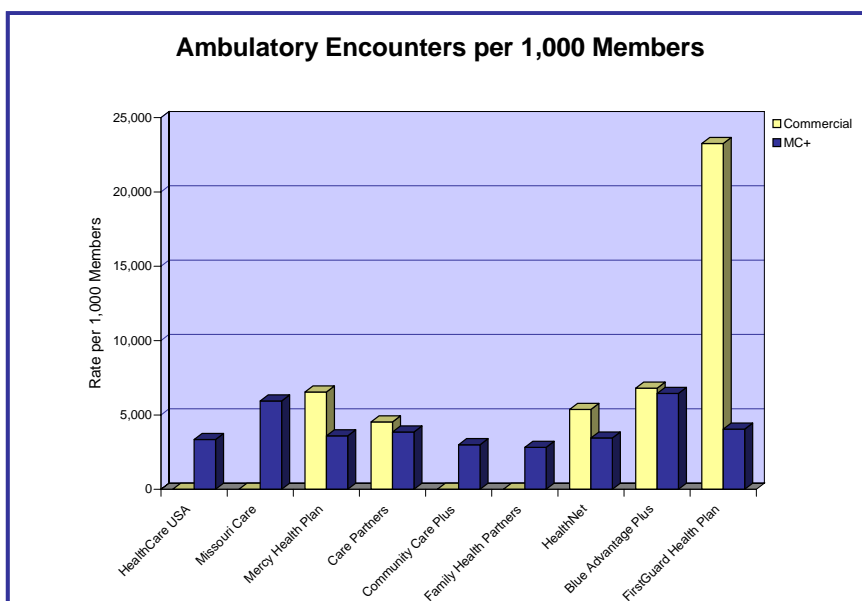
Source: 2001 CAHPS Managed Care Survey

In summary, enrollment of MC+ Managed Care Members into managed care increased 46% between 1998 and 2000, with the greatest number of Members enrolled in HealthCare USA. The majority of members report that they have been enrolled with one health plan for a year or more, chose their own health plan, obtained information about their health plan, and had little or no difficulty understanding plan materials.

## Health Service Utilization by MC+ Members

Data from the Missouri Hospital Association’s report, A Profile of Missouri HMO’s, 2001 Edition, were examined to provide a descriptive overview of the patterns of encounters for MC+ Managed Care Members and

commercial members served by MC+ Health Plans. Table C13 summarizes the rates of utilization of services by health plan and for the State overall. Figure 24 illustrates the rates of ambulatory encounters per 1,000 members, by Health Plan and provides comparison rates for Health Plans offering commercial products for CY2000. For those Health Plans offering commercial products, all had



**Figure 24**

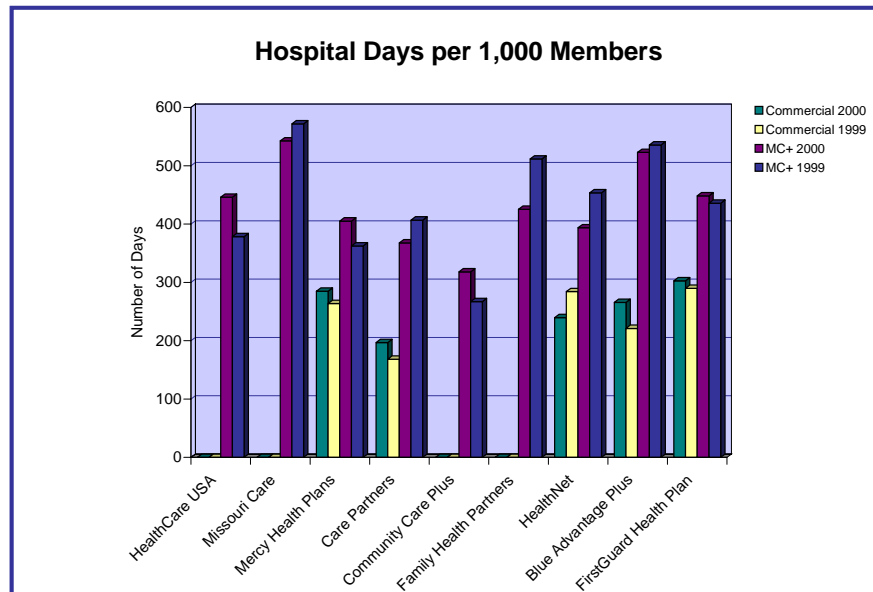
Source: 2001 Edition; A Profile of Missouri HMO's; Missouri Hospital Association

Notes: Total Ambulatory encounters is comprised of physician and outpatient services. The information for health plans operating in more than one region was aggregated, and was not able to be disaggregated by region.



higher rates of ambulatory encounters per 1,000 members (physician and outpatient services) for commercial members than for MC+ Members. This suggests a different pattern of utilization for MC+ Managed Care Members relative to commercial members.

Hospital days per 1,000 members were much higher for MC+ Managed Care Members relative to commercial members, across health plans offering both product lines. The rate of hospital days for commercial members in 2000 ranged from 197 (Care Partners) to 303 (FirstGuard Health Plan) per 1,000. The rate for MC+ Managed Care Members ranged from 318 (Community Care Plus) to 543 (Missouri Care) days



**Figure 25**

Source: 2001 Edition; A Profile of Missouri HMO's; Missouri Hospital Association

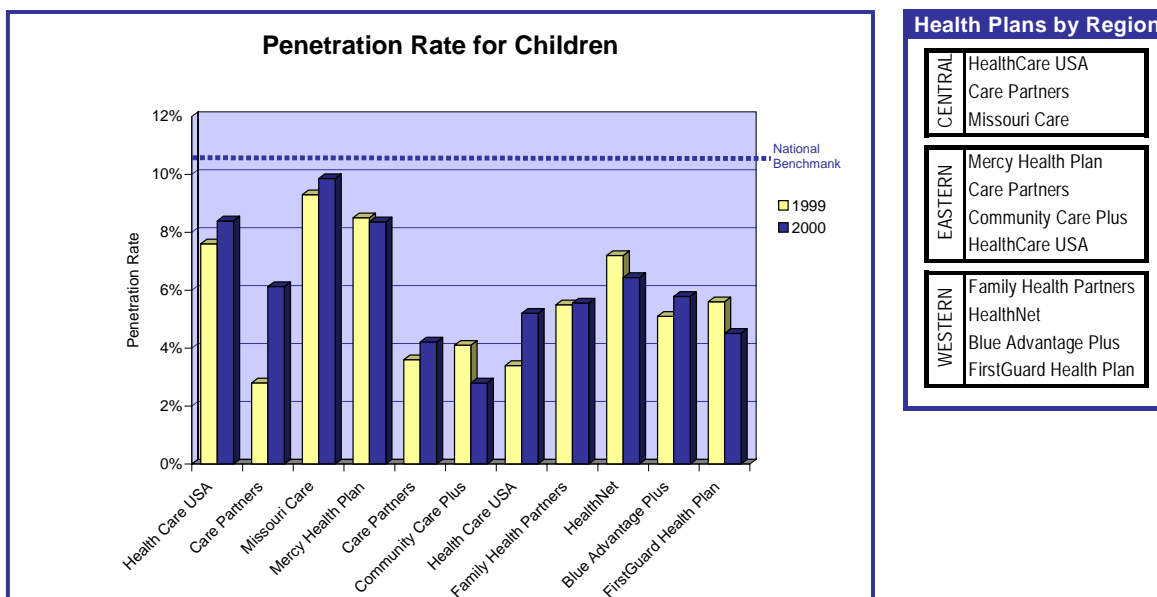
Notes: The information for health plans operating in more than one region was aggregated, and was not able to be disaggregated by region. U.S. benchmark for the rate of hospital encounters per 1,000 members in 1999 was 398 hospital days per thousand, Managed Care Trends Digest 2001; Aventis Pharmaceuticals, Inc., 2001.

per 1,000 members. This is likely largely due to population health characteristics associated with socioeconomic status (with MC+ Managed Care Members having greater health care needs), and other factors including utilization patterns as well as benefits and co-payments. There was a variable pattern of increases and decreases in the rates across health plans for MC+ Managed Care Members between 1999 and 2000 (from a decrease of 16.9% for Family Health Partners, to an increase of 19.1% for Community Care Plus; see Figure 25). A similar rate of change and pattern of variability was evident among plans offering commercial product lines. The lower rate of ambulatory and higher rate of inpatient encounters is likely a function of health status differences between commercial and MC+ Managed Care Members as well as variations in benefits and utilization patterns.

#### Mental Health and Substance Abuse Treatment Utilization

Penetration and utilization data for mental health services from 1999 to 2000 were examined and reported by the Mental Health Subgroup of the QA & I Advisory Group (2001), using data reported by MC+ Health Plans and their behavioral health vendors for MC+ Managed Care Members. Data include calendar years 1999 and 2000. On average, the penetration rate increased slightly across health plans, between 1999 and 2000, from an average of 5.2% to 5.7%, respectively. In 2000, the rate ranged from a low of 2.8% (Community Care Plus) to a high of 9.1% (Mercy Health Plans; see Figure 26 and Table C14). The average rates of penetration for

children (up to 17 years of age) were 5.6% and 6.1% for 1999 and 2000, respectively. They ranged from 2.8% (Community Care Plus) to 9.3% (Missouri Care) in 2000.



**Figure 26**

Source: Missouri Department of Mental Health and Missouri Department of Social Services, Mental Health Subgroup of the Quality Assessment and Improvement Advisory Group for MC+ Health Plans, 2002.

In 2002, a mental health benchmarking project funded jointly by the Annie E. Casey Foundation, the Center for Health Care Strategies, Inc., and the Robert Wood Johnson Foundation<sup>6</sup> reported an overall penetration rate of 21.2 per 1,000 children among those enrolled in Medicaid. In Missouri, the rate of penetration among those receiving MC+ (managed care and fee-for-service) was reported to be 30 per 1,000. The rate of penetration for mental health services for children receiving Medicaid in selected states (including Missouri) during 2000 was 10.5%.<sup>7</sup>

MC+ Managed Care Members access behavioral health services through their managed care plan, which is provided with a capitated payment to provide both primary and mental health care services. However, specific mental health and substance abuse services as well as members' mental health services are carved-out of this capitation, allowing or requiring members to obtain services through the public mental health or Fee-For-Service system. Substance abuse services from the C-STAR program are carved out for all members. Children who are in State custody (Category of Aid 4) are required to obtain mental health and substance abuse services, if medically necessary, outside of the health plan. However, health plans are responsible for all

<sup>6</sup> Ibid.

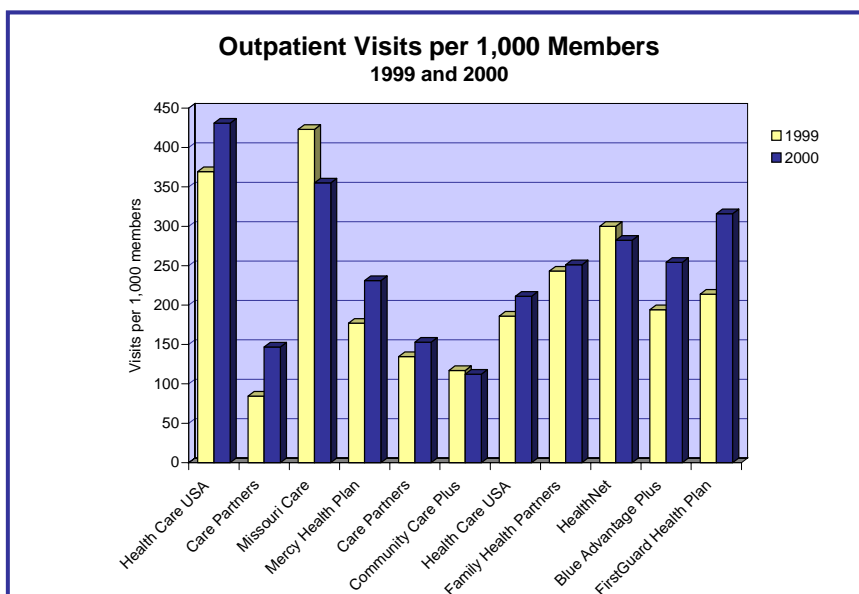
<sup>7</sup> Dougherty Management Associates. (July, 2002). *Children's Mental Health Benchmarking Project, Second Year Report*. Annie E. Casey Foundation, the Center for Health Care Strategies, Inc., and the Robert Wood Johnson Foundation.

inpatient hospital days for mental health for children in State custody with both physical and mental health diagnoses. These admissions are subject to prior authorization and concurrent review processes identified by the health plan.

For the remaining members, the health plans provide all medically necessary mental health and substance abuse services, such as psychiatric evaluations, psychiatric medication management, outpatient psychotherapy, in-home psychotherapy, acute inpatient and day treatment, and outpatient therapy. In addition to differences in the members served in the managed care and fee-for-service systems, there are differences in the coding of procedures and services. This variation in service delivery systems and claims data makes it difficult to make direct comparisons between managed care and fee-for-service systems, and with systems in other states.

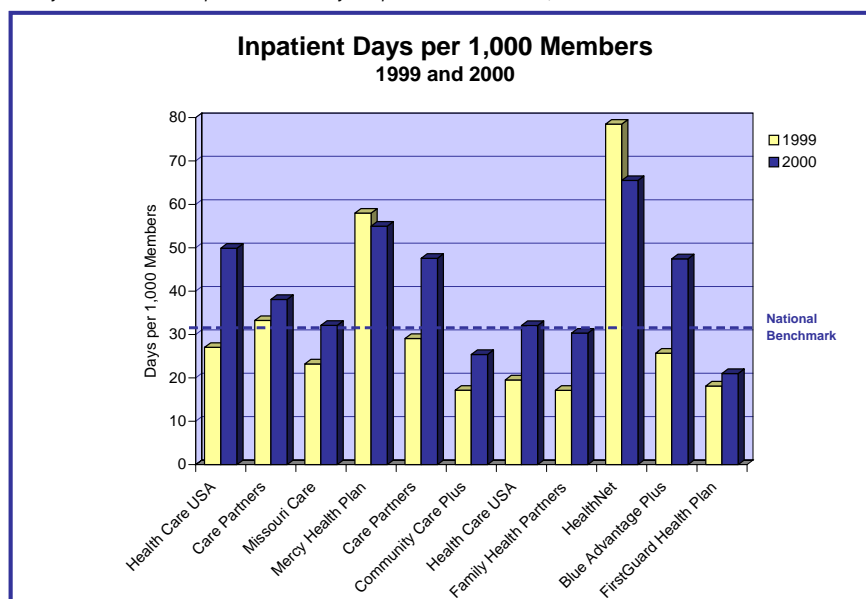
An index of utilization of mental health services for children is the rate of outpatient visits per 1,000 members. Figure 27 (see Table C15) shows the overall rate of outpatient mental health visits per 1,000 members for 1999 and 2000. The rate of outpatient visits per 1,000 members increased by 10.8% along with the penetration rate, between 1999 and 2000.

Inpatient days per 1,000 were also reported by MC+ Health Plans for 1999 and 2000 for all members (see Figure 28). Over the course of one year, the rate of



**Figure 27**

Source: Missouri Department of Mental Health and Missouri Department of Social Services, Mental Health Subgroup of the Quality Assessment and Improvement Advisory Group for MC+ Health Plans, 2002.

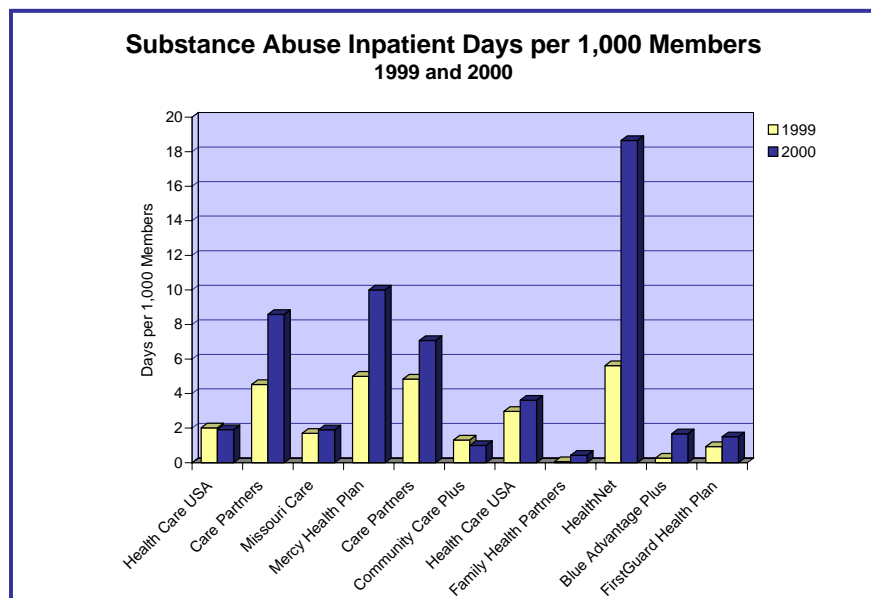


**Figure 28**

Source: Missouri Department of Mental Health and Missouri Department of Social Services, Mental Health Subgroup of the Quality Assessment and Improvement Advisory Group for MC+ Health Plans, 2002.

inpatient days per 1,000 increased 28.2% (from 31.5 to 40.4 days per 1,000). In 2000, the range in the rate per 1,000 was from 21.0 (FirstGuard Health Plan) to 65.5 days per 1,000 (HealthNet). Available benchmarks indicated a rate of 30.9 days per 1,000 for Medicaid recipients nationally; 24.7 days per 1,000 for those receiving services through State Mental Health Authorities; and 12.3 per 1,000 for those receiving services through the Missouri State Mental Health Authority (Missouri Department of Mental Health).

Finally, inpatient days per 1,000 members for substance abuse services were examined (see Figure 29). The average admissions per 1,000 members increased 90% between 1999 and 2000 (2.7 days to 5.1 per 1,000 admissions). Some variation in the rate of substance abuse inpatient days per 1,000 was evident in 2000, with a low of 0.43 (FirstGuard Health Plan) to 18.7 days per 1,000



**Figure 29**

Source: Missouri Department of Mental Health and Missouri Department of Social Services, Mental Health Subgroup of the Quality Assessment and Improvement Advisory Group for MC+ Health Plans, 2002.

(HealthNet). The same pattern for the rate of admissions was evident across the health plans.

# Key Findings and Recommendations

## MC+ Consumer Advisory Committee and Focus Group

The DMS developed the MC+ Consumer Advisory Committee to obtain input from consumers regarding program development and implementation of Managed Care. The following describes findings from review of the MC+ Consumer Advisory Committee meeting minutes and the results of the Consumer Advisory Committee Focus Group conducted on June 13, 2002.

The Consumer Advisory Committee is comprised of consumer representatives and Ombudsmen from all three (3) MC+ regions. Health plan representatives, DMS representatives, and other interested parties attend as observers. The review of the meeting minutes demonstrates the exchange of information between the State, the health plans, and consumers.<sup>27</sup> Topics of meetings have included the Legislative/Budget Update, updates from the External Quality Review Organization, review of the draft copy of the mandatory handbook language, case management, and the Health Insurance Premium Payments (HIPP) Program. Examples of improvements made with input from Committee members include the revision of the mandatory handbook language, a review of the HIPP Program, the distribution of brochures on this program to the DFS offices, DFS staff training so all possible recipients can be better informed, and revisions to the terminology form to make it easier to understand.

As part of the June 13, 2002 Consumer Advisory Committee Meeting, BHC, Inc., conducted a focus group to obtain consumers' opinions on health insurance, the MC+ Managed Care Program, and consumer involvement in the MC+ Managed Care Program. To foster communication and the free flow of ideas/opinions, only the consumer members or consumer advocates of the Committee were encouraged to attend the focus group. Participants provided written informed consent for their participation and were assured anonymity through aggregation of their responses.

The six questions that were presented for discussion during the focus group included:

1. Who has the greatest need for insurance, and to what extent do those who need insurance the most get it?
2. What barriers are there for families getting the insurance that they need?
3. If MC+ funds were extremely limited, what should be left out of the program, and/or who should be left out of the program and why?
4. In your opinion, what are the best aspects of MC+ ?

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<sup>27</sup> MC+ Consumer Advisory Committee (2001 and 2002). *Meeting Minutes: December 6, 2001 & March 14, 2002.*

5. What factors are the most important, in your opinion, and should be used to judge how well health plans are providing health care services, and how about for doctors, hospitals, and clinics?
6. How can the state and the health plans recruit consumers to be involved in decisions, and how can they utilize these consumers to improve the health outcomes of children and families?

### **Insurance Needs**

The responses for who needs insurance centered on children, senior citizens, and disabled citizens. There were also numerous concerns about the lack of coverage/benefit packages even when individuals/families have some other form of insurance, as well as concerns about the rise in co-payments. Concerns regarding the lack of coverage for individuals with mental illness, for prescriptions, and for medical equipment (such as hearing aids) were all voiced as well.

### **Barriers to Accessing Insurance**

Aside from State budget concerns, the main barriers for families getting insurance all dealt with Division of Family Services (DFS) offices. There were some issues such as lack of transportation and parking/parking meters at some of the DFS offices in St. Louis. The long wait in the DFS offices, the rudeness of the staff, staff telling people not to apply because they will not qualify, and the "uncalled-for" behavior from caseworkers were all examples of barriers to accessing MC+ . One participant empathized with staff, acknowledging that workload and morale issues are an understandable issue for the DFS offices, but felt everyone should be encouraged to apply and let the process determine whether a person or family is eligible for benefits. There were a number of examples provided of case workers being rude, disrespectful, and discouraging people from applying for benefits.

Another comment was also made regarding the MC+ logo, as it is perceived to be similar to the MCI logo. The participants felt that members may view some of the communications as junk mail and throw it away before reading it.

### **Allocation of Limited Resources**

Given the recent budgetary concerns, the third question asked who should be left out of the MC+ Program if funds were limited. The initial response was that no one should be left out, and then discussion centered around wages. For instance, one response was that for families making \$40,000 and above, only the child should be covered, and not the parents. After this, the discussion turned to ways to get the funds necessary to continue offering coverage to all who need it. It was stated that everyone would agree that health insurance coverage is needed, but as a society we do not want to pay for it, so the burden is shifted to employers. It was agreed that the wealthy have all of the coverage they need, but they do not pay enough in taxes to help out those that need the help. There was a good suggestion of searching for grants or other funding sources in order to help Missourians get the health care they need.

**Most Positive Aspects of MC+ Managed Care**

When asked about the best aspects of MC+ Managed Care, the discussion centered on care for children. The increase in immunization rates, introduction of case management (specifically for children with asthma), the use of reminder post cards (by both Health Plans and providers) for immunizations and/or EPSDT visits were all cited as examples of the best aspects of MC+ Managed Care. However, despite these improvements, participants felt there was still room for improvements in the area of patient education.

**Assessing Quality**

The factors in judging health plans and providers centered on education and the legislature. One participant stated that "education creates impact". According to participants, more educational materials regarding well-care, prenatal issues, and services available to members need to be distributed. The consensus was that this would lead to improvements in the overall health of Missourians and cut down on expenses, such as ER visits. As far as the legislature was concerned, the desire to have them sit in on this Committee or "live the life" of one of the consumers of MC+ would help them see the needs of MC+ Members.

**Increasing Consumer Participation**

As far as recruiting consumers to become involved in the MC+ Managed Care Program, it was suggested that a better job is needed informing potential participants. It was stated that a better use of local and personal contacts would be beneficial, as well as rotating the meetings to various geographic locations around the state (meeting in Jefferson City all of the time may be a hindrance to some individuals. One member summarized this sentiment by stating, "More individuals and consumers appreciate having a voice instead of the system talking to and for them"<sup>28</sup>.

**Opportunities for Improvement**

Consumers reported that the greatest aspect of the program is that it provides health insurance to children who would not otherwise have health insurance. Some of the barriers and suggestions for improvement revolved around accessibility to the program itself, such as being able to physically access the offices and feeling as though they are treated disrespectfully by family service representatives. Results of a telephone access survey conducted by BHC, Inc., for the 1115 Waiver Evaluation found that offices answered the telephone quickly and were generally courteous and helpful when asked for assistance, but that the workers had the most difficulty explaining benefits<sup>29</sup>. The most difficulty was encountered in the urban areas, such as St. Louis County and Kansas City offices.

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<sup>28</sup> BHC, Inc. (2002). *MC+ Consumer Advisory Committee Focus Group Responses June 13, 2002*.

<sup>29</sup> BHC, Inc (2002). *Evaluation of the Medicaid Section 1115 Waiver: Report of Findings*

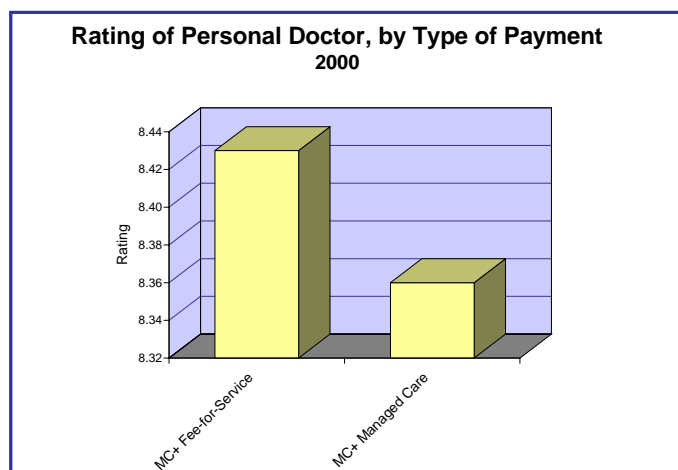
When consumers were asked about how to increase consumer participation in the Committee, the idea of rotating the meetings to various sites in the different MC+ Managed Care regions was raised and should be considered. It was found on site visits with Health Plans that they have had difficulty organizing consumer committees or meetings. Some of the members of this Consumer Advisory Committee stated their desire to work in conjunction with the plans to help establish individual plan Consumer Committees and their willingness to participate on such committees. Representatives from the Committee may be able to work with Health Plans in their region, with support from the Ombudsmen to recruit and encourage local consumers to participate on plan or region-wide Advisory Committees. The Health Plans may be willing to host the State Consumer Advisory Committee Meetings in order to obtain consumer feedback. Given the concerns from consumer advocates about the notification of members regarding termination or denial of services, the Consumer Advisory Committee may be a good resource for reviewing this process and the methods for notification of members.

## Access to and Satisfaction with Health Services for MC+ Members

Available State data were examined to compare indices of access to and satisfaction with MC+ Managed Care, as well as utilization of health care and satisfaction with providers. Comparisons were made across type of service delivery within the MC+ Managed Care Program (Fee-For-Service and Managed Care) and within geographic regions of the State (Central, Eastern, Western, and other regions) to examine the relative impact of MC+ Managed Care on health access and satisfaction.

### Consumer Assessment of Health Plans Survey (CAHPS), Adult Members

One source of data used to assess the relative satisfaction of MC+ Managed Care Members and their parents is the Consumer Assessment of Health Plans Survey (CAHPS). The CAHPS was



**Figure 30**

Source: Department of Social Services, Consumer Assessment of Health Plans Data, Missouri 2000

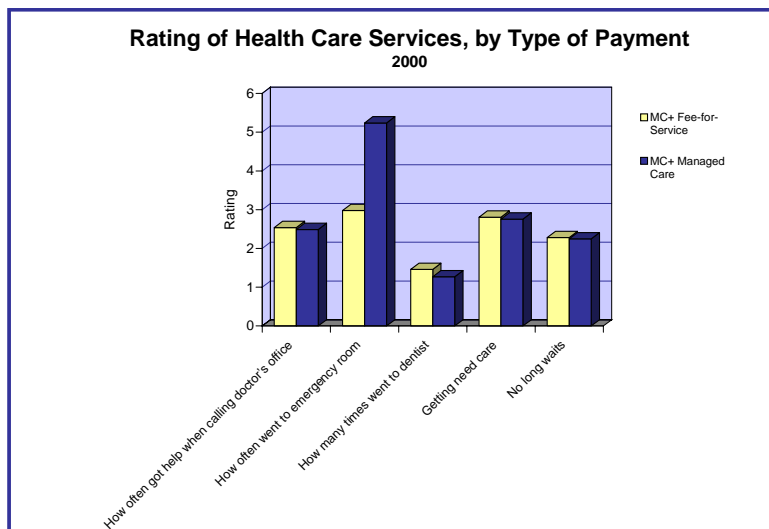
Note: Rating scale ranged from 1 to 10, with a higher number representing a more positive rating.

administered in the year 2000 by the Division of Medical Services and the Department of Health and Senior Services (DHSS) for Managed Care and Fee-For-Service recipients enrolled in the MC+ program in 1999 to assess adult member and recipient satisfaction with care. Results indicated significant differences between Fee-For-Service Recipient and MC+ Managed Care Member reports of satisfaction regarding access to care and ratings of their personal doctor (see Table



C16 and Figure 30). Recipients enrolled in Fee-For-Service were more satisfied with their personal doctor than Members in Managed Care.

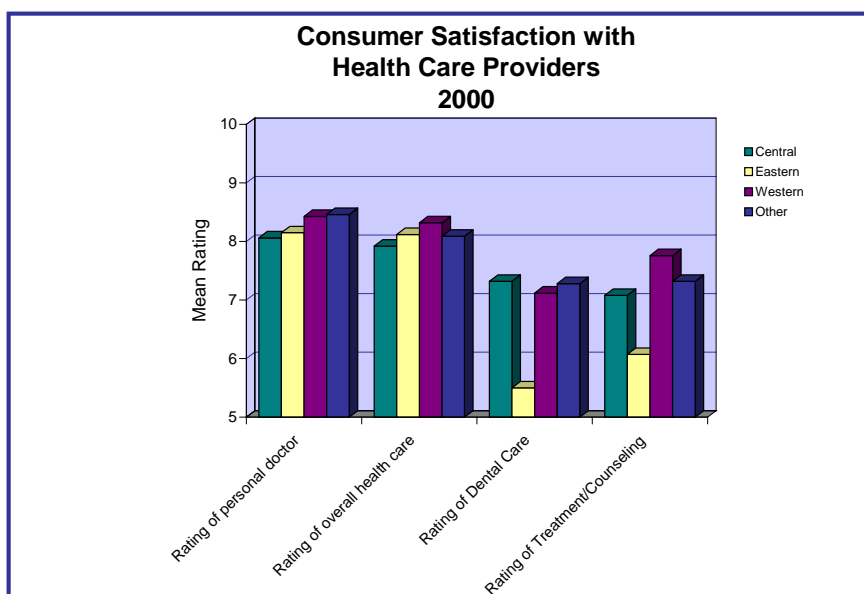
Adult Managed Care Members were more likely to report going to the emergency room, while Fee-For-Service recipients reported greater satisfaction with getting help when calling a doctor's office, attending the dentist more often, getting needed care, and not having to wait long periods for appointments. Although statistically significant, most of these differences were relatively small and may not be clinically or administratively significant, except for the rate of emergency room visits (see Figure 31). The difference in emergency room use may be due to MC+ Managed Care requirements for pre-authorization for hospital admission. There were no differences between MC+ Managed Care Members and Fee-For-Service Recipients for access to prescriptions, mental health care, or primary health care.



**Figure 31**

Source: Department of Social Services, Consumer Assessment of Health Plans Data, Missouri 2000  
 Note: Rating scale ranged from 1 to 3, with a higher number representing a more positive response. For the responses asking "How often...", 1 = "sometimes" or "never", 2 = "usually", and 3 = "always". For those asking about "How much of a problem...", 1 = "big problem", 2 = "small problem", and 3 = "not a problem". This item requested the respondent to fill in the blank.

The Adult CAHPS data were also used to compare satisfaction of MC+ Managed Care Members in each of the managed care regions (Central, Eastern, & Western) as well as Fee-For-Service Regions ("other") during 1999. Significant differences were found across geographic regions in the rating of actual care as well as the ease and frequency of care. Average ratings of health care, physicians, dental care, and behavioral health treatment/counseling are



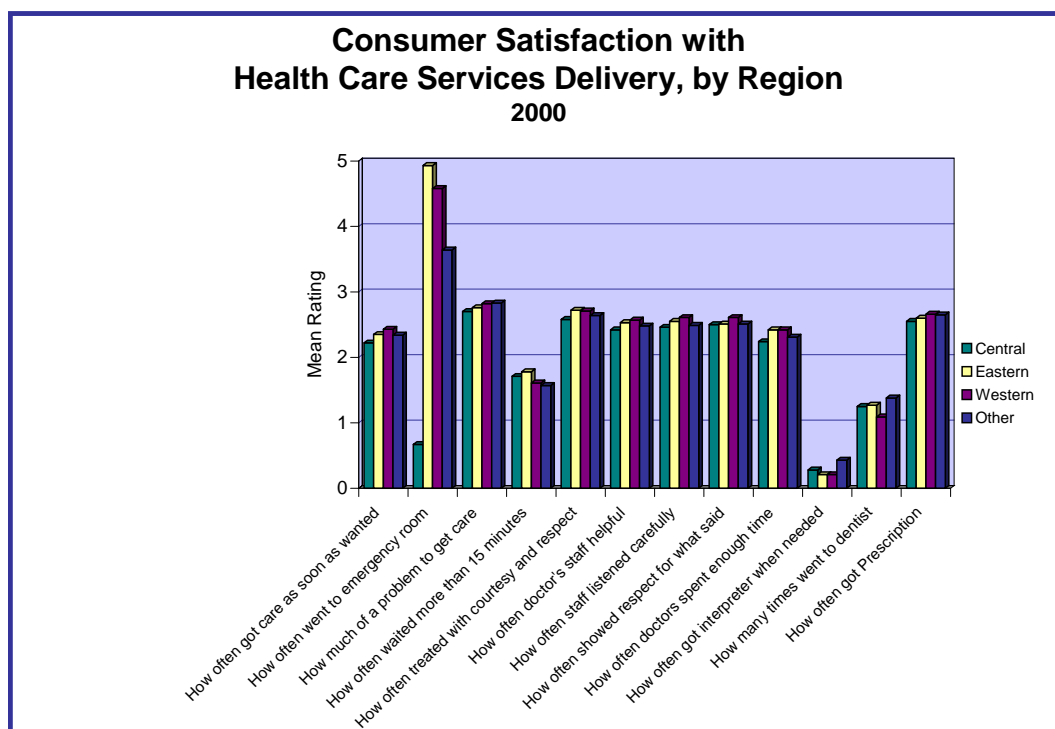
**Figure 32**

Source: Department of Social Services, Consumer Assessment of Health Plans Data, Missouri 2000  
 Note: Rating scale ranged from 1 to 10, with a higher number representing a more positive response.

presented by Region (see Figure 32). Ratings ranged from 1 to 10, with 10 representing the highest level of satisfaction.

Significant differences emerged in the rating of overall health care, with Western Region Members reporting the highest level of satisfaction with health care. In addition, Western Region Members as well as Members from non-managed care regions of the State reported the highest ratings of their personal physician. Ratings of dental care were highest in the Central and Other regions of the State, and lowest in the Eastern Region. Western Region Members reported the highest level of satisfaction with treatment or counseling, followed by the Other regions, the Central Region, and the Eastern Region.

Adult consumer ratings of the access to and delivery of care by MC+ providers were also compared across Regions using the CAHPS data. Significant differences emerged among a number of items (see Figure 33 and Table C17). For ratings of satisfaction, members were asked “How much of a problem was it to...”, and were provided with three categories of responses, with the highest rating representing the most satisfaction (1 = “A big problem”, 2 = “A small problem”, and 3 = “Not a problem”). Significant differences emerged in average ratings across Regions. The highest ratings consistently occurred in the Western Region of the State, indicating that Members in the Western Region were more satisfied with their care, or had better care available to them. The Eastern Region had the highest level of satisfaction with



**Figure 33**

Source: Department of Social Services, Consumer Assessment of Health Plans Data, Missouri 2000

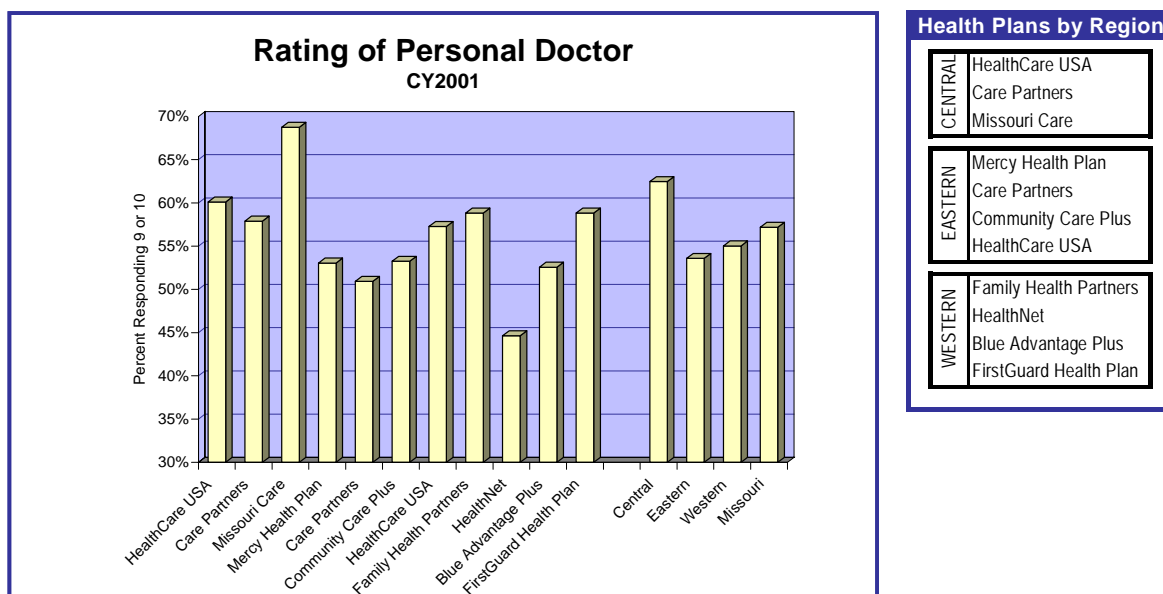
Note: Rating scale ranged from 1 to 3, with a higher number representing a more positive response. For the responses asking “How often...”, 1 = “sometimes” or “never”, 2 = “usually”, and 3 = “always”. For those asking about “How much of a problem...”, 1 = “big problem”, 2 = “small problem”, and 3 = “not a problem”. For emergency room visits the respondent filled in the blank.

waiting periods (waiting more than 15 minutes for an appointment); and the Central Region had the highest ratings of satisfaction with getting an interpreter when needed. With regard to utilization, the Eastern Region followed by the Western Region and all Other Regions had the highest rates of self-reported frequency of attending the emergency room, with the Central Region at a much lower rate than the remaining regions. The frequency of attending the dentist was reported to be highest among those in Other (Fee-For-Service) regions of the State, while it was lowest in the Eastern Region.

### Consumer Assessment of Health Plans Survey (CAHPS), Child Members

Using similar items but a different version of the CAHPS, satisfaction with care for children was summarized by health plan and region for some of the major indicators of satisfaction with providers. Parents of Missouri MC+ Managed Health Care Members were more satisfied with their child's personal physician, but somewhat less satisfied with their specialist, overall health care, and with their health plans compared to other Medicaid recipients across the United States. It should be noted that aggregate data precluded statistical analytical comparisons. The data presented indicate the proportion of respondents who gave the highest ratings of satisfaction (ratings of 9 or 10 on a 0 to 10-point scale).

The highest levels of satisfaction with primary care physicians were reported by those in the Central Region, particularly Missouri Care Members (68.8%), while the lowest were reported for the Eastern Region as a whole, with the lowest individual plan ratings from HealthNet Members (44.6%; see Table C18 & Figure 34).

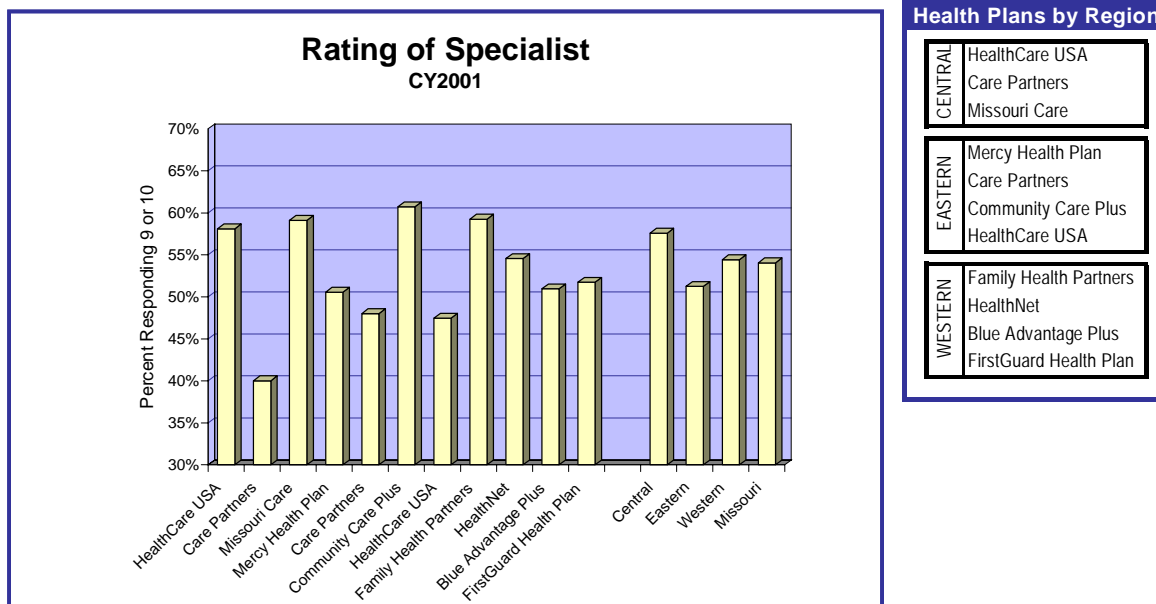


**Figure 34**

Source: Missouri Division of Medical Services, Department of Social Services, 2001 Consumer Assessment of Health Plans Survey; Agency for HealthCare Quality and Research, Annual Report of the National CAHPS Benchmarking Database, 2000: What Consumers Say about the Quality of their Health Plans and Medical Care.

Note: The ratings are based on a scale of 0-10 where 0 is the "worst possible" and 10 is the "best possible"

Members in the Central region were most satisfied with the quality of their specialty health care, while those in the Eastern Region were the least satisfied overall (57.6% compared to 51.2%; Table C23 & Figure 42). Ratings of specialty providers were highest for Community Care Plus providers (60.7%), and lowest for Care Partners' Central region specialists (40.0%).

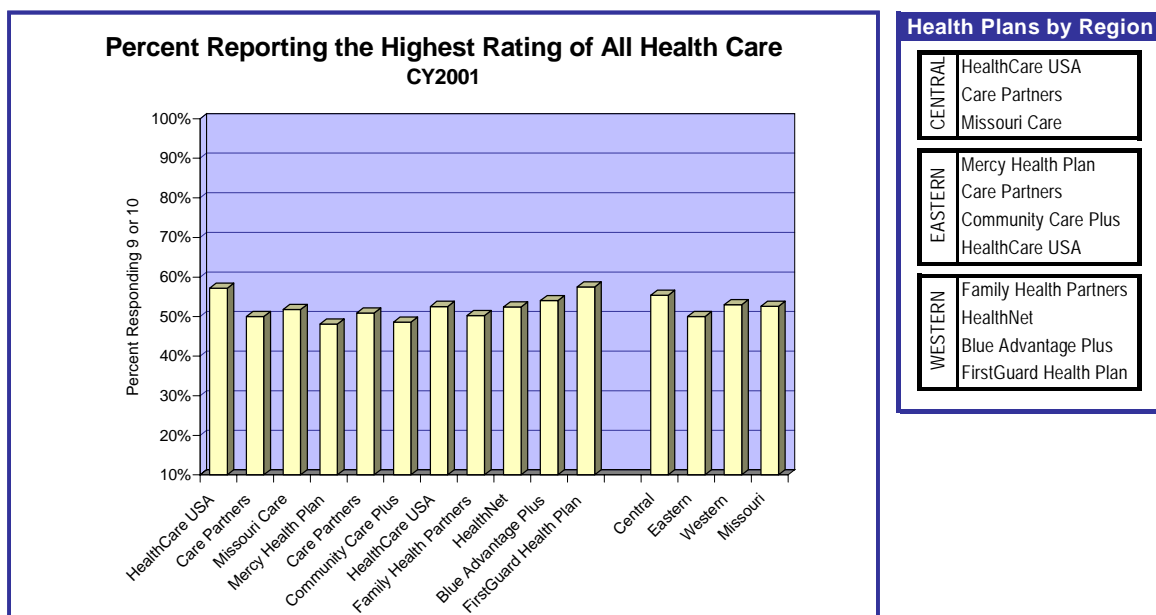


**Figure 35**

Source: Missouri Division of Medical Services, Department of Social Services, 2001 Consumer Assessment of Health Plans Survey.

Note: The ratings are based on a scale of 0-10 where 0 is the "worst possible" and 10 is the "best possible"

Ratings of overall health care were highest in the Central Region (55.4%), followed by the Western (53.0%) and Eastern (50.1%) regions. For specific health plans, satisfaction with overall



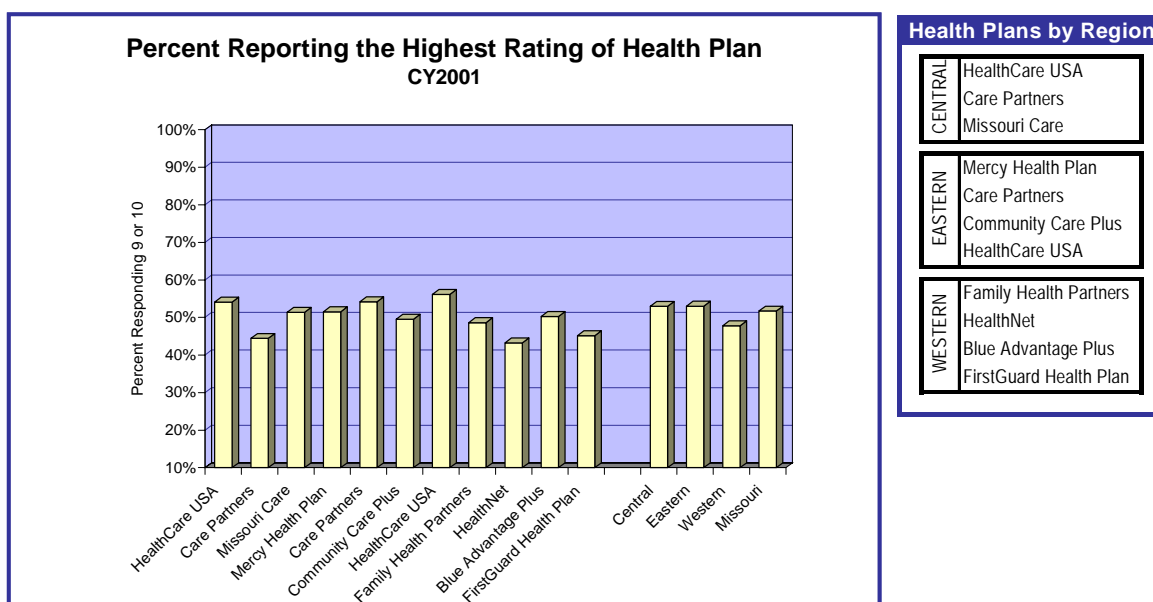
**Figure 36**

Source: Missouri Division of Medical Services, Department of Social Services, 2001 Consumer Assessment of Health Plans Survey.

Note: The ratings are based on a scale of 0-10 where 0 is the "worst possible" and 10 is the "best possible"

health care was highest for FirstGuard (57.5%) and HealthCare USA (57.2%), and lowest for Community Care Plus (48.6%) and Mercy Health Plans (48.1%; Table C18 & Figure 36).

Consumers were equally satisfied with their health plans in the Eastern and Central Regions (53% compared to 47.8% in the Western region). Members enrolled in HealthCare USA in the Eastern Region reported the highest ratings of satisfaction (56.2%), which were consistent with the national rates (56.0%), while those enrolled with HealthNet were the least satisfied (43.2%; Table C18 & Figure 37).



**Figure 37**

Source: Missouri Division of Medical Services, Department of Social Services, 2001 Consumer Assessment of Health Plans Survey.

Note: The ratings are based on a scale of 0-10 where 0 is the "worst possible" and 10 is the "best possible"

Findings from analysis comparing those enrolled in MC+ for Kids (1115 Waiver) and those enrolled in either MC+ Managed Care or Fee-For-Service (1915b Recipients) on CAHPS measures in 2000 indicated that those in MC+ for Kids (1115 Waiver) reported significantly better access to dental care, mental health counseling, needed care, and better ratings of physician communication. They also reported fewer problems with waiting for appointments. It is possible that 1115 members have different patterns of consumption of services.<sup>30</sup>

## Summary

In summary, MC+ adults were 1) less likely than uninsured adults to avoid necessary health care due to concerns about cost; 2) the barrier of cost for acute health care is becoming less of a

<sup>30</sup>BHC, Inc. (2002). *Evaluation of the Medical Section 1115 Waiver: Repeat of Findings, Review Period: September 1, 2000–August 31, 2002.*

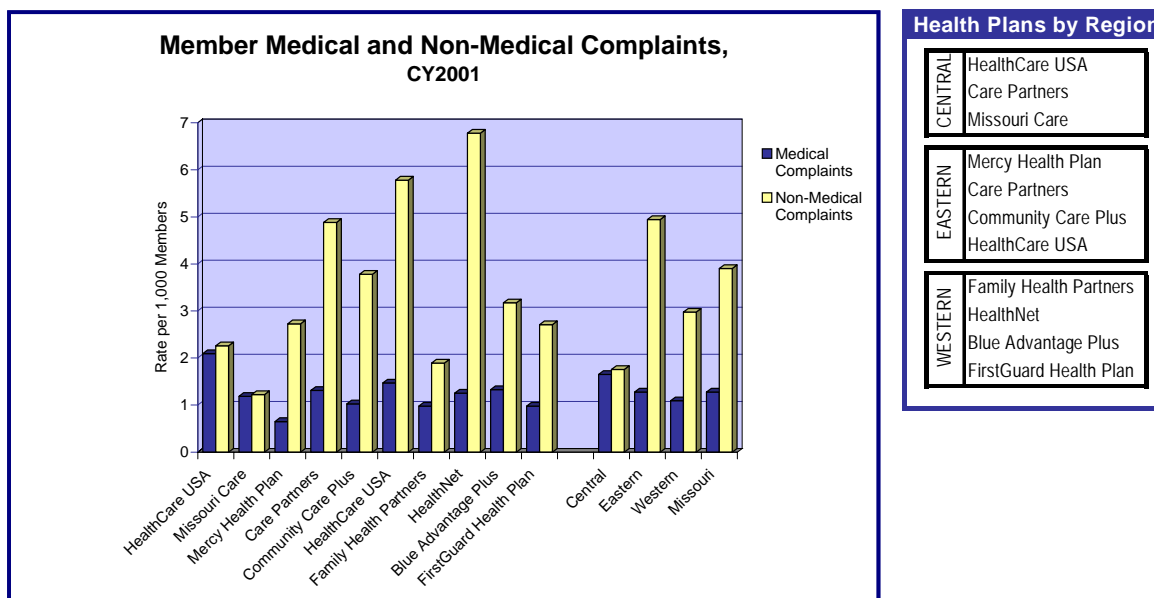
concern; and 3) MC+ Managed Care health services are increasingly being used for routine preventive care. The pattern of satisfaction for MC+ members indicates that those in the Fee-For-Service Regions of the State were more satisfied with health care services and their providers than those in the Managed Care Regions. However, this finding should be interpreted with caution, as it was not possible to control for the urban and rural differences in satisfaction or health care delivery. In CY2000, recipients in the Western Region of the State reported being more satisfied with the quality of care received from providers, with Eastern Region recipients reporting relatively low rates of satisfaction with dental and behavioral health care. This may be related to problems with behavioral health network adequacy, and concerns regarding dental provider services. Satisfaction with the delivery of care was generally highest for those in the Western Region, followed by the Eastern and Central Regions. The most dramatic differences between regions was in the utilization of emergency room services, with the Central region evidencing dramatically lower utilization than the remainder of the State, based on Member self-report. The health plans which discontinued services in 2001 were least likely to receive high ratings of satisfaction on ratings of their personal doctor (HealthNet), their overall care (Care Partners, Central Region), and their health plan (Care Partners, Central Region; and HealthNet).

## Member and Provider Complaints and Satisfaction with Health Plans

Member and provider satisfaction for those enrolled in or providing services through MC+ Health Plans (Managed Care only) were examined using data submitted to DMS for complaints submitted by health plans to the Division of Medical Services from 2000 to 2001. In addition, data obtained from members on the Consumer Assessment of Health Plans Survey (CAHPS) were examined to assess satisfaction with the complaint resolution process. This data provides important information for identifying specific reasons for relative satisfaction or dissatisfaction, as well as focused opportunities for improvement. In interpreting relative differences across health plans, it should be noted that there were specific quality improvement projects conducted with HealthCare USA and HealthNet, to increase the documentation of complaints. DMS conducted on-site education with HealthCare USA member services staff regarding the processing of complaints, grievances and appeals. As part of this educational effort, HCUSA submitted CD-Rom data that contained a download of all calls. DMS staff reviewed the data, identified the complaints, and provided this information to the plan. As a result, changes from 2000 to 2001 may reflect better data collection rather than an increase in actual complaints. Between 2000 and 2001, the proportion of members whose complaints were logged increased for HealthCare USA (from .35% to 1.05% of members in the Eastern Region and from .26% to .46% of members in the Central Region) and HealthNet (from .50% of members in 2000 to .76% of members in 2001). The average proportion of members statewide whose complaints were recorded by health plans increased from .37% in 2000 to .57% in 2001. All data are presented by health plan and region of operation, with the exception of Care Partners. Care Partners Central and Eastern region member complaints are reported in aggregate form.

## Member Complaints

The overall rate of member medical complaints in CY 2000 was .84 per 1,000 members, and increased to 1.28 per 1,000 members in CY2001. This represents a 52.9% increase in medical complaints. The rate of non-medical complaints in 2001 was 3.90 per 1,000 members, an increase (53.8%) from 2.54 per 1,000 members from 2000 (see Figure 38). The Eastern and Central Regions had an increase in Member medical complaints from 2000 to 2001 (85.4% and 157.0%, respectively), while the Western Region evidenced a 7.2% decrease in Member medical complaints.

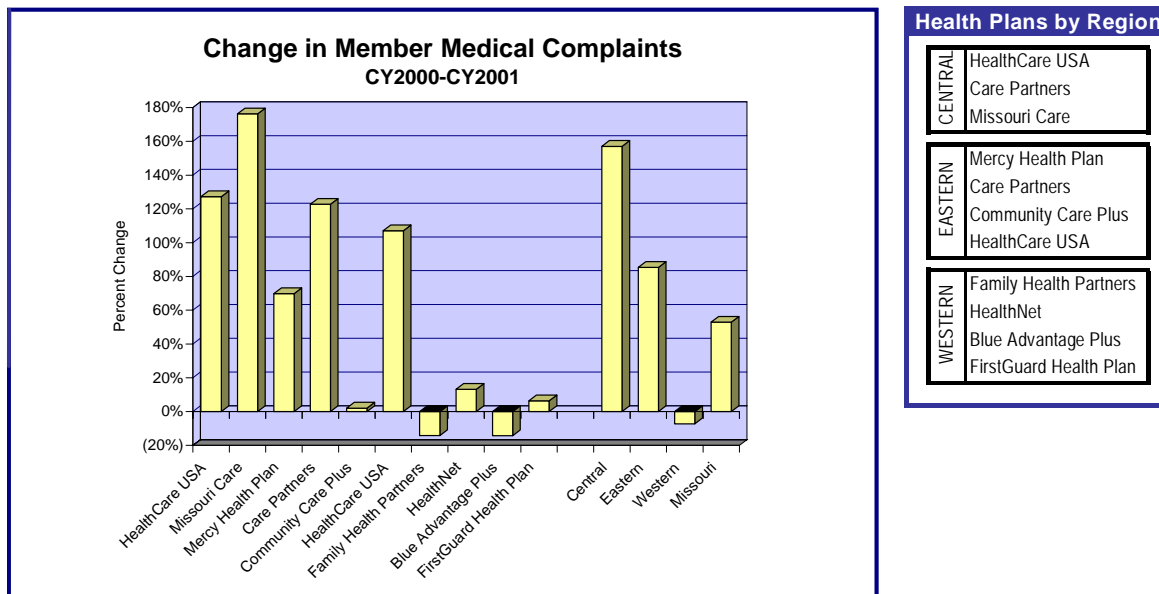


**Figure 38**

Source: Enrollment from, Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen

Notes: Enrollment data is as of December 31 of the previous year. Enrollment totals include enrollees with a future start date. Enrollment totals do not include enrollees with a future stop date. Figure for Care Partners represent Cental and Eastern regions.

Figure 39 shows the change in the rate of member complaints across health plans, from CY2000 to CY2001. The greatest rate of change in member medical complaints was for Missouri Care, which demonstrated a 176.3% increase in member medical complaints overall. Family Health Partners and Blue Advantage Plus both had the greatest decrease in medical complaints (14.2% and 14.3% respectively). However, the lowest actual rate of medical complaints was for Mercy Health Plans (.65 per 1,000 members), while the highest was for HCUSA, Central Region (2.09 per 1,000 members).

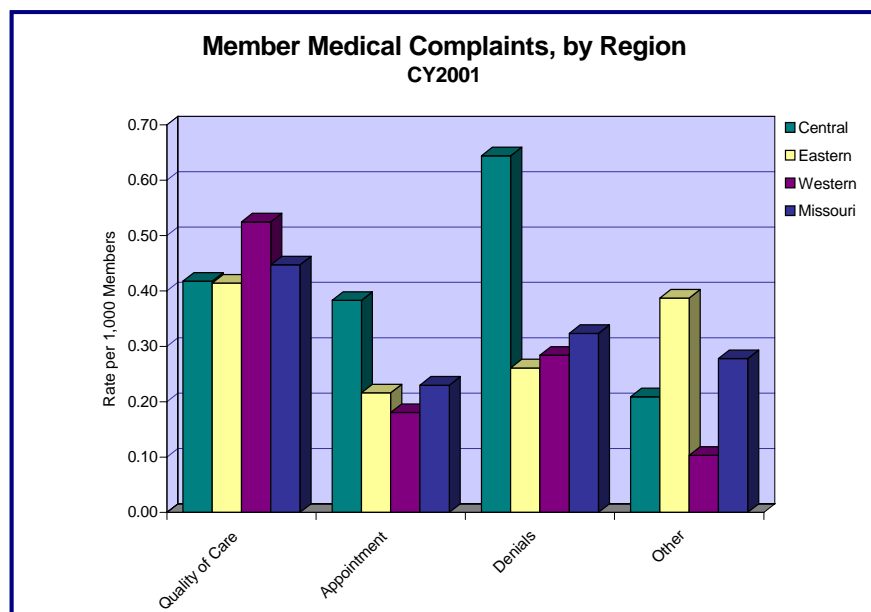
**Figure 39**

Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen

Notes: Enrollment data is as of December 31 of the previous year. Enrollment totals include enrollees with a future start date. Enrollment totals do not include enrollees with a future stop date. Figure for Care Partners represent Cental and Eastern regions.

The type of member medical complaint was summarized across Regions and compared with the State rate (see Figure 40). The highest rate of member medical complaints overall was for quality of care (.45 complaints per 1,000 members), followed by complaints regarding denial of services (.32 per 1,000 members), “other” medical complaints (.28 per 1,000 members), and complaints regarding appointments (.23 per 1,000 members). The highest rate of quality of care complaints was

demonstrated for Blue Advantage Plus (.96 per 1,000 members). The “other” medical complaints included an inability to reach the primary care provider (PCP), the PCP would not return calls, and that there was a change in the PCP. Complaints regarding quality of care were highest in the Western Region (.52 per 1,000 members); complaints regarding appointments and denials were highest in the

**Figure 40**

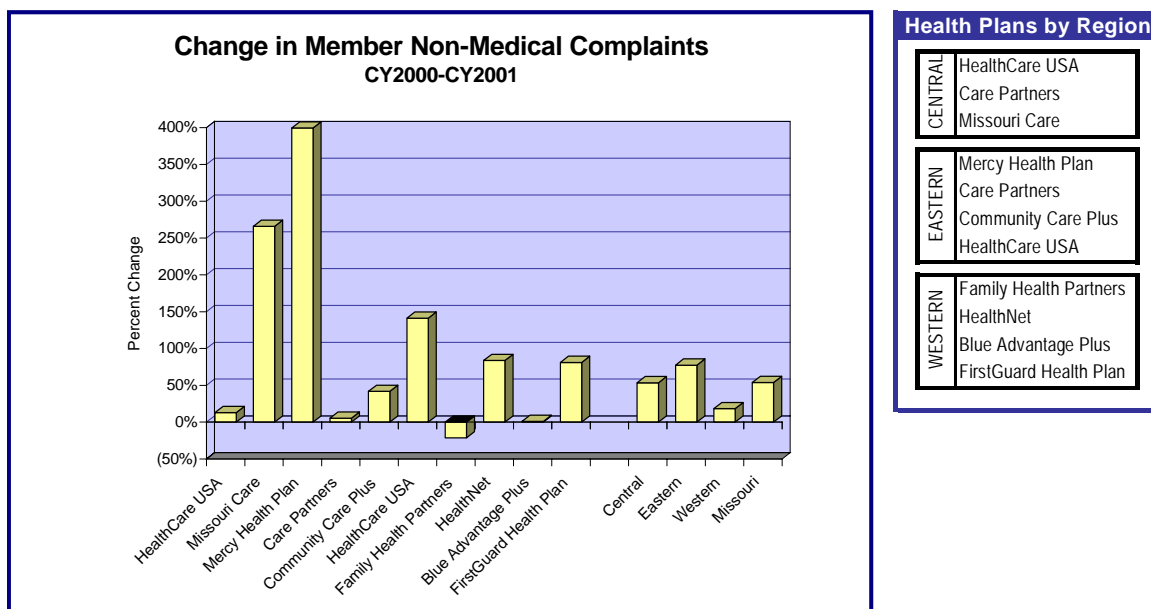
Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen

Notes: Enrollment data is as of December 31 of the respective year. Enrollment totals include enrollees with a future start date. Enrollment totals do not include enrollees with a future stop date. Figures for Care Partners in the Eastern Region represent both Central and Eastern Regions.



Central Region (.38 and .64 respectively); and complaints regarding other medically-related issues were highest in the Eastern Region (.39; see Table C19).

For member non-medical complaints, all Regions showed an increase between CY2000 and CY2001 (18.2% for Western; 53.4% for Central, and 77.4% for Eastern). The Western Region had the smallest increase in member non-medical complaints (18.2%), followed by the Central Region (53.4%) and the Eastern Region (77.4%). All health plans except Family Health Partners (which had a 21.4% decrease) had an increase in member non-medical complaints. (ranging from 1.0% for Blue Advantage Plus, to 399.4% for Mercy Health Plan; see Table C20 and Figure 41).



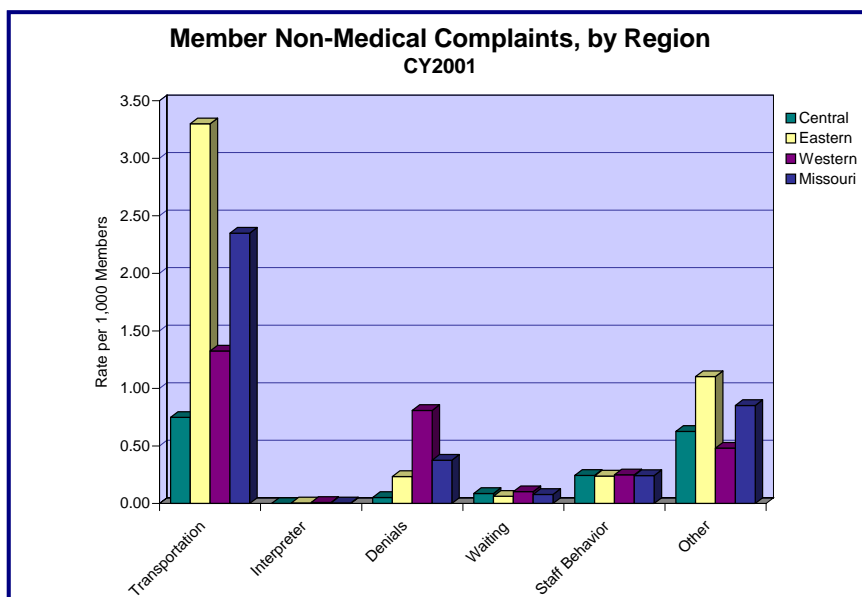
**Figure 41**

Source: Missouri Department of Social Services, Division of Medical Services, 2002

Note: Figures for Care Partners represent Central and Eastern Regions

Member non-medical complaints by Region are illustrated in Figure 42. The highest rate of non-medical complaints was for transportation services, at a rate of 2.35 per 1,000 across the state, with the highest rate in the Eastern Region (3.30 per 1,000 members), followed by 1.32 per 1,000 members for the Western Region and .75 complaints per 1,000 members in the Central Region. HealthCare USA in the Eastern Region had the highest rate of transportation complaints (4.32 per 1,000). Other complaints (including members being charged at the time services are rendered, receiving bills, PCP not available, and offices not cleaned) were the next highest rate of non-medical complaints overall, with a rate of .85 per 1,000 members across the state, ranging from

.48 for the Western Region, .63 for the Central Region, and 1.10 for the Eastern Region. Complaints for waiting and staff behavior were similar across Regions, with a State rate of .08 per 1,000 members for complaints regarding waiting, and a rate of .24 per 1,000 members for staff behavior. No complaints were logged regarding interpreter service availability. The highest rate of complaints for transportation were in the Eastern Region (3.30 per 1,000 members), while the highest rate of complaints for denials were in the Western Region (.81 per 1,000 members), and the highest rate of complaints for other non-medical reasons were in the Eastern Region (1.10 per 1,000 members; see Table C20).



**Figure 42**

Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen; Missouri Department of Social Services, Division of Medical Services, 2002

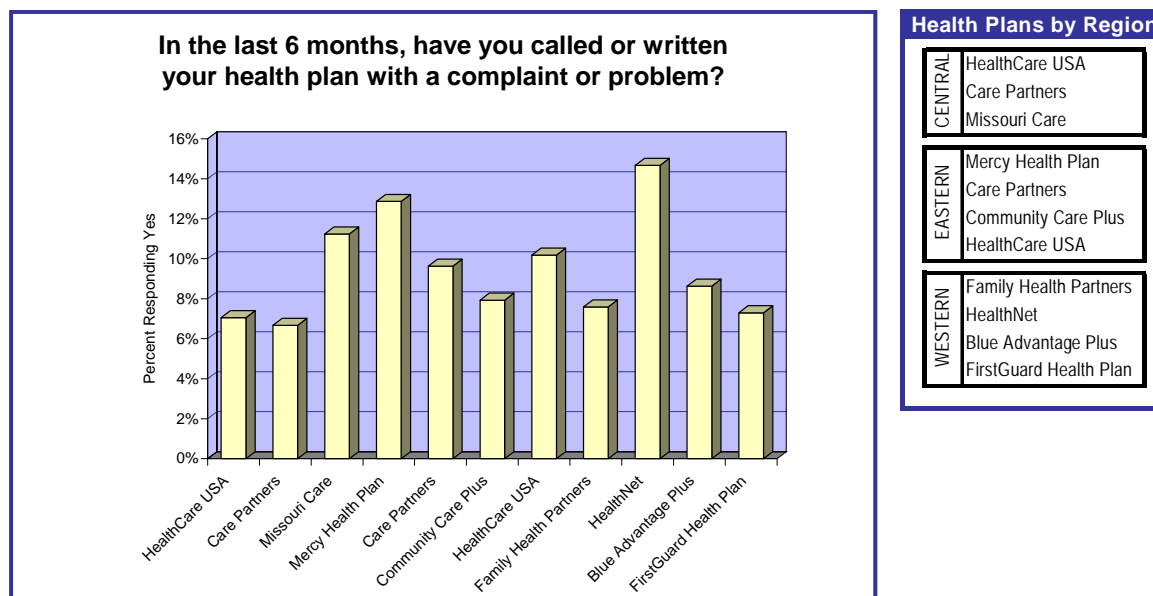
Note: Figure for Care Partners in the Eastern Region Data represents Central and Eastern Regions.

### Member Satisfaction

The Consumer Assessment of Health Plans Survey (CAHPS) was used to examine the process of resolution of complaints logged, as reported by MC+ Health Plan Members, and their satisfaction with the complaint/grievance process (see Table C21).<sup>31</sup> A total of 247 (9.2%) of the 2,441 respondents indicated that they had made a complaint with their health plan. This ranged from 2 complaints (6.7%) reported for Care Partners – Central Region, to 39 (12.9%) for Mercy Health Plans (see Figure 43). When comparing this to the complaint data, it is interesting to note that the total rate of member medical complaints per 1,000 members in 2001 was 1.28. If the rate of complaints as reported by consumers responding to the CAHPS were calculated, it would be 101 complaints per 1,000 members. Although it is possible that those who responded to the CAHPS tended to be those who were dissatisfied with services and would be more likely to complain, the relatively high level of satisfaction reported does not support this argument, and would not likely account for the nearly tenfold difference in health plan and consumer perceptions of a complaint. Also, when consumers were questioned about having made a complaint, they were asked about the prior 6-month period, while the complaint and grievance data reported to the State are for

<sup>31</sup> NCQA. 2001 *Consumer Assessment of Health Plans Survey*, 2001.

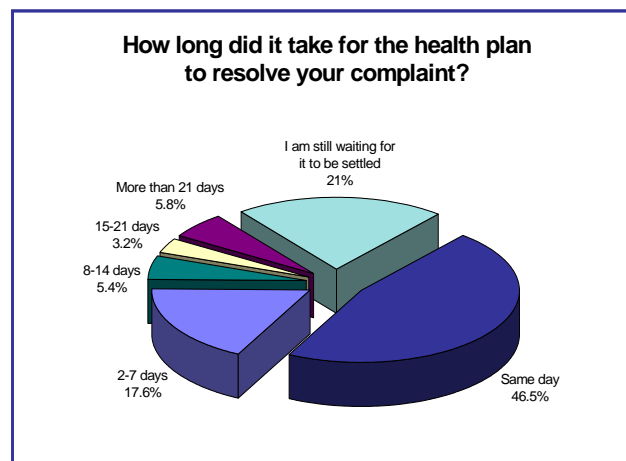
the entire calendar year 2001. This difference highlights variation in data sources and methods of identifying satisfaction or dissatisfaction.



**Figure 43**

Source: Division of Medical Services, 2001 CAHPS, 2001

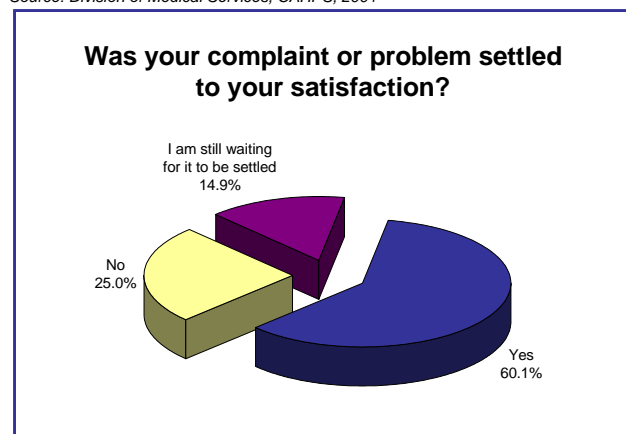
Another index of satisfaction with and the effectiveness of the health plan complaint and grievance process is the length of time that it takes to resolve a complaint. Of those who reported that they logged a complaint with their health plan in the last 6 months, almost half (47%) reported that the complaint was resolved in the same day the complaint was made, while 18% reported the complaint was resolved within 2 – 7 days. Only 6% reported that it took more than 21 days, and 21% were still awaiting resolution of the complaint (see Figure 44).



**Figure 44**

Source: Division of Medical Services, CAHPS, 2001

MC+ Managed Care Members who were surveyed using the CAHPS were also asked about their satisfaction with the resolution of their complaints to health plans (“Was your complaint or problem settled to your satisfaction?”, see Figure 45). A majority of those whom reported having made a complaint



**Figure 45**

Source: Division of Medical Services, CAHPS, 2001

in the last 6 months reported that they were satisfied (60%), while 25% reported they were not satisfied, and 15% were still awaiting resolution of their complaint.

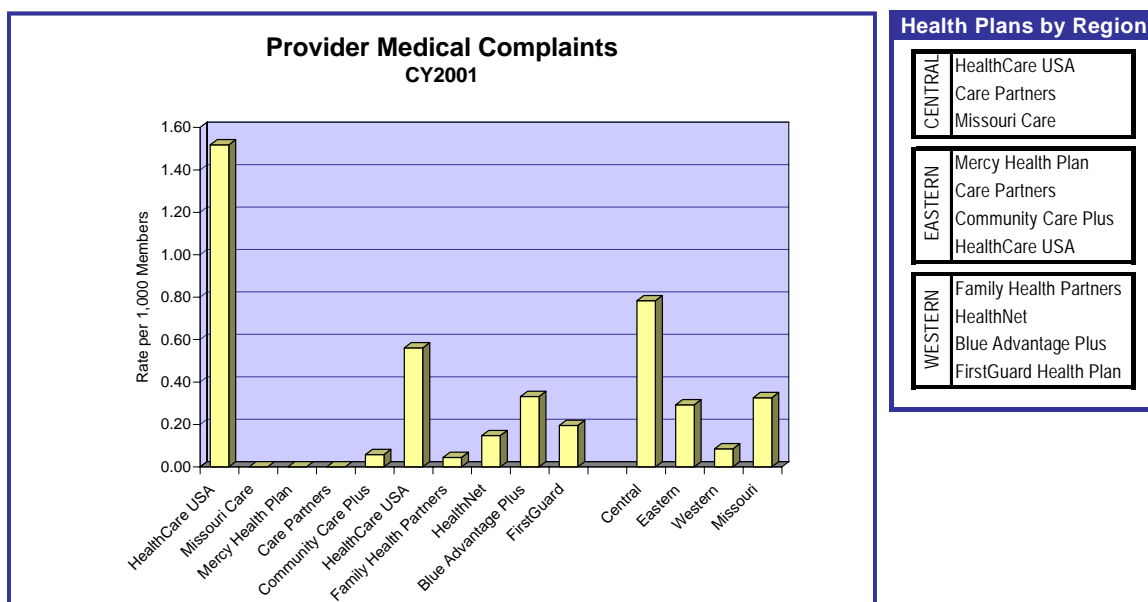
### Provider Satisfaction

Another index of satisfaction with health plan service delivery and administration is the use of provider feedback. Provider complaint data were available for 2001, and the rates of provider complaints per 1,000 members were calculated by Region and Health Plan, to provide an index of provider satisfaction that could be compared across health plans and regions (see Table C22).

As with member complaint logging, there were efforts in the part of DMS to increase the recording of provider complaints with health plans, to better identify opportunities for improvement. As a result, there were steady increases in provider complaints from 1999 to 2001 in the rate of complaints recorded by HealthCare USA in both the Central and Eastern Regions. This may account for the observed differences in the rate of complaints across health plans.

### Complaints by Health Plan

The overall rate of provider medical complaints per 1,000 members was .33, ranging from .09 in the Western Region to .29 in the Eastern Region, and .78 complaints per 1,000 members in the Central Region (see Figure 46). Provider non-medical complaints were much higher, at a rate of 11.56 complaints per 1,000 members overall, ranging from a low of 2.20 in the Western Region to 15.08 in the Eastern Region and 16.86 in the Central Region (see Figure 47).

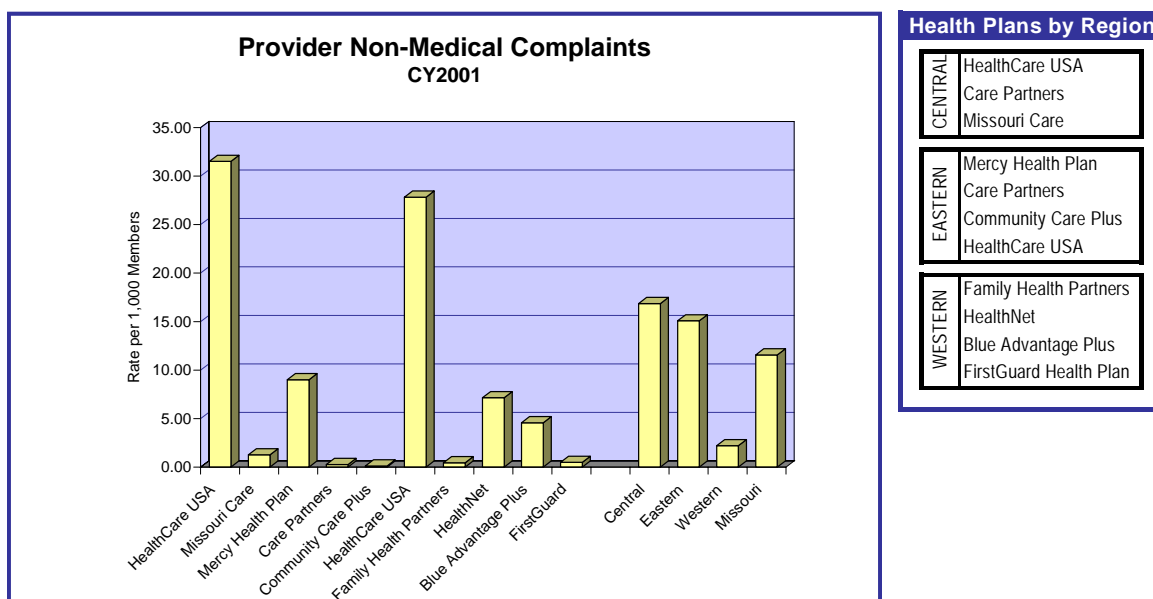


**Figure 46**

Source: Missouri Department of Social Services, Division of Medical Services, 2002

Note: Figures for Care Partners represent Central and Eastern Regions

The highest rate of medical complaints was 1.52 complaints per 1,000 members for HealthCare USA in the Central Region, primarily accounted for by complaints regarding denial of services (1.18; see Figure 46). The second highest rate of complaints overall was HealthCare USA in the Eastern Region (.56), again primarily accounted for by complaints regarding denial of services (.52 per 1,000 members). Provider non-medical complaints were also highest for HealthCare USA in the Central (31.5 per 1,000 members) and Eastern Regions (27.83 per 1,000 members; see Figure 47).

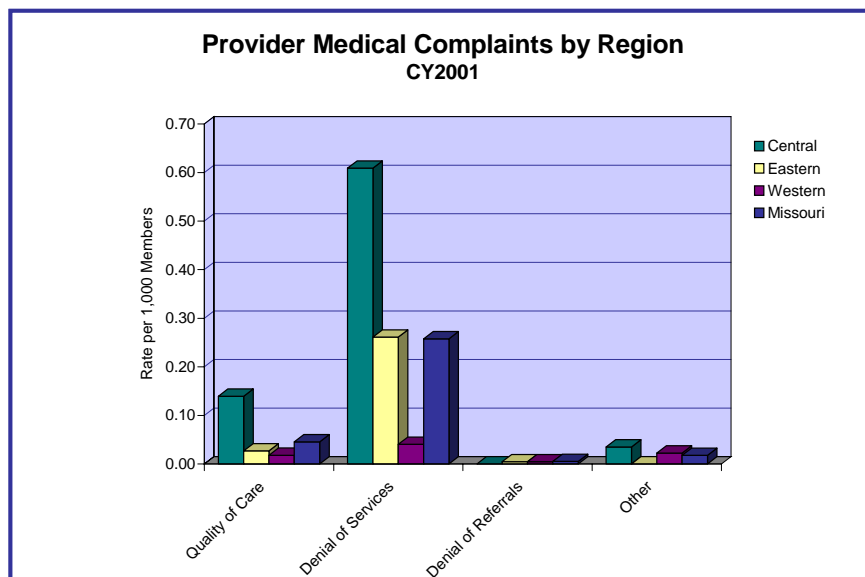


**Figure 47**

Source: Missouri Department of Social Services, Division of Medical Services, 2002

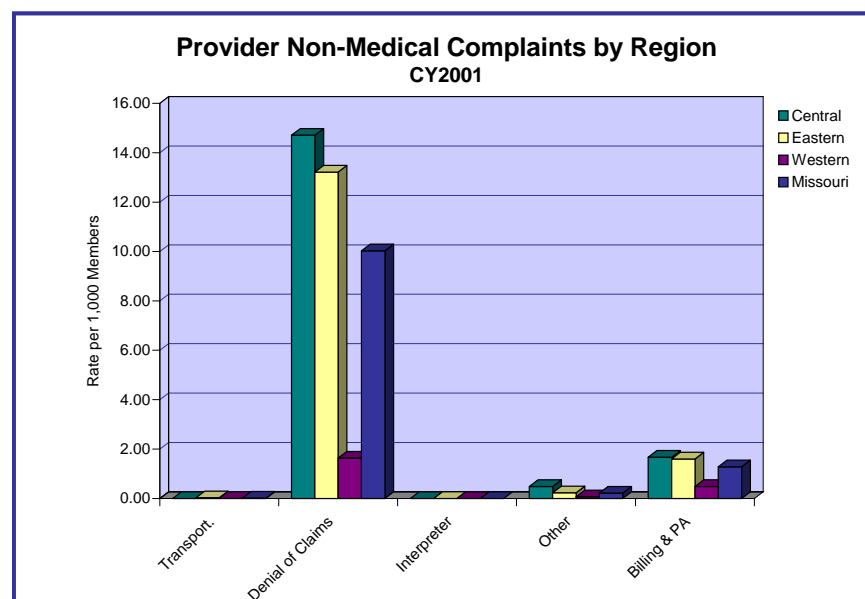
Note: Figures for Care Partners represent Central and Eastern Regions

For all types of provider medical complaints, the Central Region had the highest rate of all types of complaints, from quality of care, to denial of services, denial of referrals, and other medical complaints (see Figure 48). For provider non-medical complaints, the greatest number and rate of complaints was for denial of claims, at a rate of 10.03 complaints per 1,000 members, with a low in the Western Region (1.63 per 1,000), followed by the Eastern Region (13.22 per 1,000 members), and the Central Region (14.71 per 1,000 members; see Figure 49).

**Figure 48**

Source: Missouri Department of Social Services, Division of Medical Services, 2002

Note: Care Partners figure in the Eastern Region Data represents Central and Eastern Regions.

**Figure 49**

Source: Missouri Department of Social Services, Division of Medical Services, 2002

Note: Care Partners figure in the Eastern Region Data represents Central and Eastern Regions.

## Summary

There were regional and health plan variations in the pattern and rates of member satisfaction during 2001. The greatest increase in the rate of member medical complaints occurred in the Eastern Region between 2000 and 2001. However, the greatest number of complaints (per 1,000 members) occurred in the Central Region in 2001. The rate of Member medical complaints regarding the quality of care decreased in the Western Region, especially with Blue Advantage Plus and Family Health Partners, but remained among the highest in the State.

Member non-medical complaints regarding appointment problems and denial of services were the highest in the Central Region. The Eastern Region evidenced the greatest increase in member non-medical complaints between 2000 and 2001 as well as the highest rate of non-medical complaints per 1,000 members in 2001. The highest rates for non-medical complaints regarding transportation services and other non-medical complaints (e.g., receiving bills, PCP not available, being charged at the time services are rendered, etc.) were in the Eastern Region. Member non-medical complaints relating to the denial of claims was highest in the Western Region, and were primarily accounted for by HealthNet. Improvement of transportation services for Eastern Region health plans, and HealthCare USA in particular should be a focus for improving the access to care for members.

According to members, the process of complaints and grievances appears to be satisfactory. Less than 10% of MC+ members reported logging a complaint with their health plan in 2001. Of those, the majority indicated satisfaction with the resolution of the complaint, while some were still awaiting resolution; and the majority of complaints were resolved within one day or one week. HealthNet members were more likely to report logging a complaint with their health plan, followed by Mercy Health Plan and Care Partners' Central Region members. This suggests that members in plans that were closing out or had recently closed out services encountered some difficulty with the transition process, and is consistent with the member complaint data.

Overall, providers were satisfied with MC+ Health Plan services, but least satisfied with non-medically related services. Providers in the Western Region were most satisfied, while those in the Central Region were least satisfied with health plan medical and non-medical services.

The majority of complaints from providers related to non-medical services such as denial of claims, transportation, billing and preauthorization, and transportation. The overall rates of medical and non-medical complaints were highest in the Central and Eastern Regions, primarily accounted for by HealthCare USA rates. The rates of denial of services and denial of claims per 1,000 members were the highest medical and non-medical complaints by providers, especially in the Central Region. It is recommended that efforts be focused specifically with improving relations between HealthCare USA and its provider networks in both the Central and Eastern Regions.

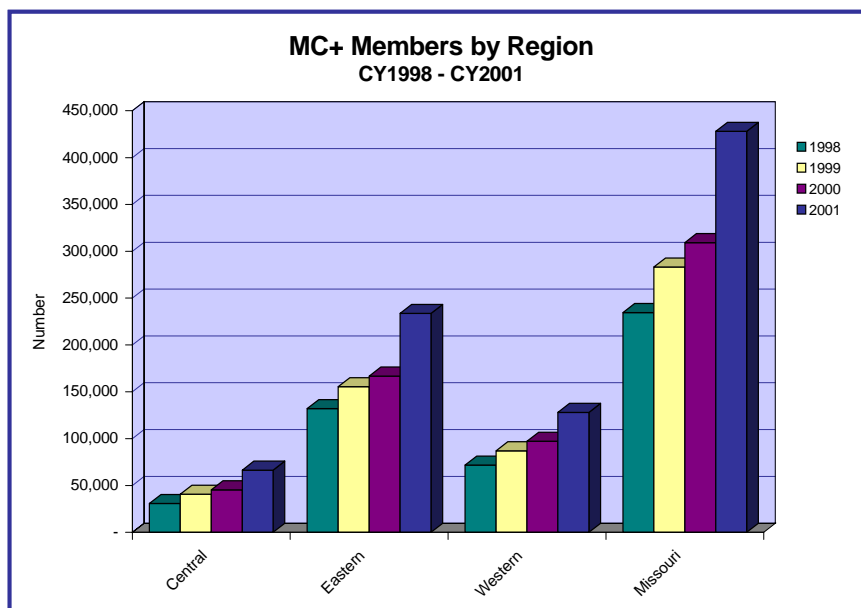
## Documentation of Care

### Enrollment

Enrollment data were obtained from DSS and extracts were created by the EQRO to determine the number of MC+ Members who were enrolled during CY2001 (see Appendix A for additional detail regarding methods and procedures). A data file of 1.4 million individuals identified through Individual Document Control Numbers (IDCN) were included in the database. Of these, 682,277

IDCNs were identified as being eligible for the MC+ Fee-For-Service or Managed Care Program at some time during CY2001. A total of 428,037 Members were identified as being enrolled in MC+ Health Plans on June 30, 2001. All attempts to eliminate duplicate listings were made prior to use for sampling and analyses.

The number of MC+ Managed Care Members derived from the database was substantially higher (38.4%) than that listed by the previous EQRO contractor for CY2000. Several additional sources were used to validate this data base. To calculate encounters per 1,000 members, the number of members as of December 31, 2001 was used, as those were the cases that



**Figure 50**

Sources: Missouri Department of Social Services, Division of Medical Services, Eligibility and Enrollment files, March 2002

contributed to the encounter claims summarized herein. Table C23 and Figure 50 show the distribution of members by region using this database.

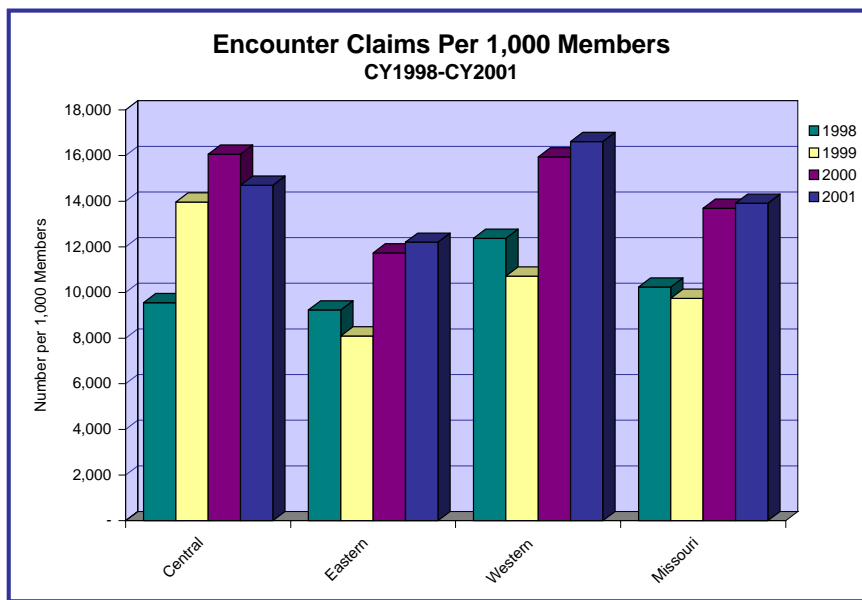
### Encounter Claims

Encounter data were obtained from DSS and extracts created to determine the number and type of encounters attributed to MC+ Health Plans. A data file of 23 million records was provided to BHC, Inc. in March 2002. These data represented Fee-For-Service and Managed Care claims processed during CY2001. The file included paid claims and those completely adjudicated. Dates of services ranged from the Spring of 1997 through the Spring of 2002. This file was parsed of cases without health plan numbers and last dates of service other than those in CY2001, resulting in over 11 million encounters. This was further reduced to eliminate those plan numbers which were invalid (i.e., "80000000" or labeled as "MISSING"), resulting in 6.7 million encounters). A final extract was made to include Claim Types for Medical, Outpatient, Dental, Inpatient, and Home Health, resulting in 5.9 million encounter claims which were used for analyses.

Overall, the number of encounter claims in CY2001 was higher than that reported in previous years (5.9 million in CY2001, compared to 4.2 million during CY2000). This may be a result of increased enrollment and also improvement in provider claim submission.



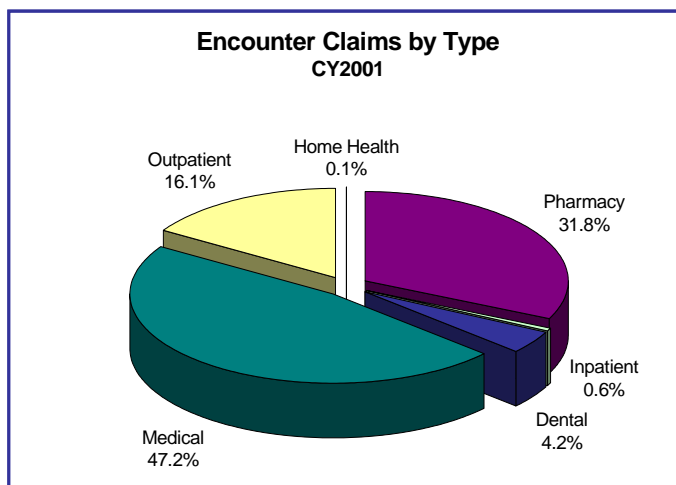
Analyses of encounter claims per 1,000 members remained basically the same, with a rate of 13,909 encounters per 1,000 members in CY2001 compared to 13,691 encounters per 1,000 members in CY2000. Figure 51 shows the number of encounter claims per 1,000 members by Region and Statewide MC+ Managed Care for years 1998 through 2001. Encounter claims by Health Plan, Region, and the State are shown in Tables C24 to C30.



**Figure 51**

Sources: Missouri Department of Social Services, Division of Medical Services, Enrollment and Encounter files, March 2002

Encounter claims by claim type are shown in Figure 52. As seen, medical, outpatient, and pharmacy encounters comprise the majority of the claims. The number of inpatient claims identified in the database was substantially different from previous reports and required additional investigation. It was determined that claims identified as “Inpatient” included multiple records reflecting various services provided during inpatient admissions (e.g., room charges, radiology, pharmacy, respiratory therapy).



**Figure 52**

Sources: Missouri Department of Social Services, Division of Medical Services, Enrollment and Encounter files, March 2002

Consolidating these multiple records resulted in a total of 29,973 inpatient encounters with CY2001 service dates, more approximating actual admissions rather than specific inpatient services. Using this methodology, the number of admissions (70 per 1,000 members) was lower than previous years’ in which a range of 102–104 admissions per 1,000 members was reported.

#### MC+ Healthy Children and Youth (HCY) Program, Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)

The Healthy Children and Youth (HCY) Program in Missouri is a primary and preventive health care program for Medicaid-eligible children and youth under the age of 21 years. The goal of the

program, also known as Early Periodic Screening, Diagnosis, and Treatment (EPSDT), is to have a health care home for each child, that is, to have a primary care provider who manages a coordinated, comprehensive, continuous health care program to address the child's health needs. The health care should follow the screening periodicity schedule, perform interperiodic screens when medically necessary, and coordinate any specialty needs<sup>32</sup>.

Every recipient under the age of 21 years (or his or her legal guardian) is informed of the HCY program by the Division of Family Services at the initial application for assistance, and reminded of the program at each annual redetermination review checked by DMS and/or the Health Plans. DMS has made program requirements and procedures available to Health Plans and providers via the Internet, provider manuals, and Medicaid Bulletins. To assist providers with service coordination and documentation, DMS and the Health Plans have also produced standard EPSDT/HCY forms that are age-specific and include all required examination components (see Figure 53 for periodicity schedule). These forms are available to providers without cost. The use of these forms in 2001 was voluntary, but made mandatory in CY2002.

| EPSDT Periodicity Schedule |               |
|----------------------------|---------------|
| • Newborn (2-3 days)       | • 3 years     |
| • By one month             | • 4 years     |
| • 2-3 months               | • 5 years     |
| • 4-5 months               | • 6-7 years   |
| • 6-8 months               | • 8-9 years   |
| • 9-11 months              | • 10-11 years |
| • 12-14 months             | • 12-13 years |
| • 15-17 months             | • 14-15 years |
| • 18-23 months             | • 16-17 years |
| • 24 months                | • 18-19 years |

**Figure 53**

Source: Department of Social Services, Division of Medical Services, *Physicians Manual*, November 2001

The Centers for Medicare and Medicaid Services (CMS) and DMS have recommended that health plans and providers achieve an 80% rate of completion of EPSDT and preventive services, with incentives provided for health plans that exceed an 80% rate of participation based on HCFA-416 calculations from the claims database.

A full HCY/EPSDT screen includes the following elements:

- A comprehensive unclothed physical examination;
- A comprehensive health and developmental history including assessment of both physical and mental health developments;
- Health education (including anticipatory guidance);
- Appropriate immunizations according to child age;
- Laboratory tests as indicated (appropriate according to age and health history unless medically contraindicated);
- Lead screening according to established guidelines;
- Hearing screening;

<sup>32</sup> Missouri Department of Social Services, Division of Medical Services. (November 2001). *Physicians Manual*.

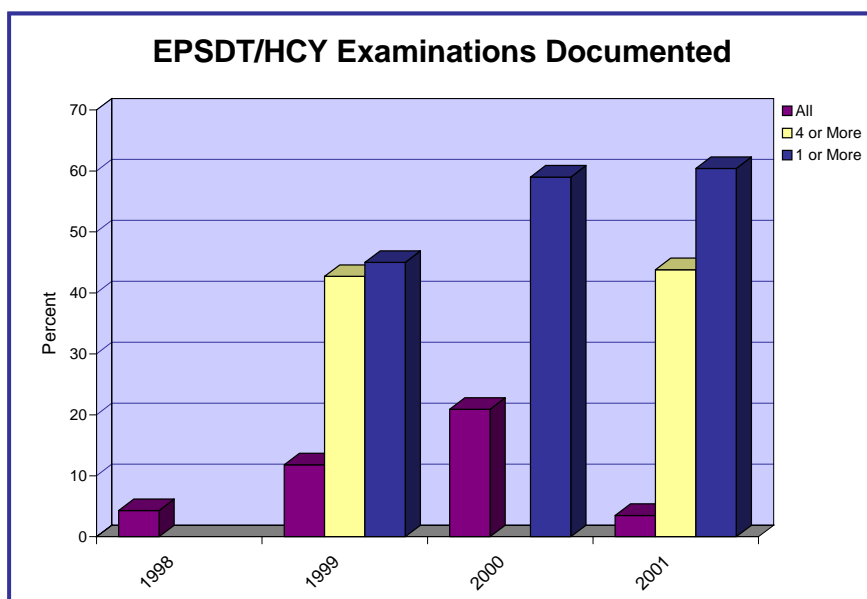
- Vision screening; and
- Dental screening.

### Documentation of EPSDT

As part of the CY2001 EQR evaluation, BHC conducted a medical record review of children from birth to six years of age to determine the degree to which EPSDT/HCY examinations were documented. Medical records were obtained for 506 children who were six years of age and under, and who were continuously enrolled in the same MC+ Health Plan for at least 12 months. EPSDT/HCY elements, including the types of components and dates of service were abstracted from the medical records by registered nurses, using a standard data collection instrument (Appendix B). Immunizations were assessed independently of the EPSDT/HCY examination measures. To ensure plans received credit for all exams, BHC allowed inclusion of elements contained in the medical record (e.g., progress notes, developmental charts, provider-specific forms) as well as those on the standard State forms.

Figure 54 and Table C31 show the percentages of documented HCY examinations based on EQR reports from CY1998–2000 and the CY2001 EQR medical record abstraction.

As seen, the percentage of ALL eligible examinations (with the exception of vaccinations, which are reported separately) documented was 3.5% of age-specific screenings.



**Figure 54**

Source: BHC, Inc., CY2001 EQRO Medical Record Review, 2002

This is a very high standard, but it is a required component of the program. The CY2001 rate was considerably lower than the rate reported for CY1999 and CY2000, but it is comparable to that obtained in CY1998. This may be due to differences in data collection and analysis, as BHC, Inc. conducted data analysis for both CY1998 and CY2001 reviews, and it is not known how analyses were conducted in the interim years. The most common examinations that were not found in the documents were dental and hearing examinations.

The rate of documentation increased dramatically when less than all components were measured. Using four or more components increased the EPSDT/HCY rate to 43.8%; and to 60.4% when one

or more components were documented. Many of the records in which there was only one component recorded were acute care visits (e.g. otitis media, injuries), rather than well-child visits. Such visits may represent missed opportunities for further examinations and offer an opportunity for encouragement to return for well-child visits. It is also possible that not all well-child visits were documented, as a substantial number of medical records were not submitted by providers, resulting in potential under-reporting of actual EPSDT/HCY rates.

### HCFA-416 and HEDIS EPSDT Reports

Despite problems involved in comparing specific findings from different sources, it is useful to look at the results of different measures, as they provide different types of information. Two major sources used by MC+ Health Plans and DMS are the HCFA- 416 and the HEDIS well-child measures. Plan-specific rates provided by DMS as of December 2001 (for the period July 1, 2000 through June 30, 2001) indicated rates ranging from 39% (Community Care Plus) to 57% (Blue Advantage Plus). These rates are shown by Health Plan and Region in Table C32.

Plan-specific HEDIS 2000 measures for well child visits in the first 15 months of life were reported as ranging from 46.0% (HealthCare USA, Eastern Region) to 98.1% (Care Partners).

For children in their 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> year of life, the rates ranged from 12.9% (HealthCare USA, Central Region) to 53.0% (Missouri Care). This, like the HCFA-416 report and the CY2001 medical record review, reflects a substantial decrease in participation reported for the older group of children. Health Plan-specific HEDIS rates are shown in Table C33.

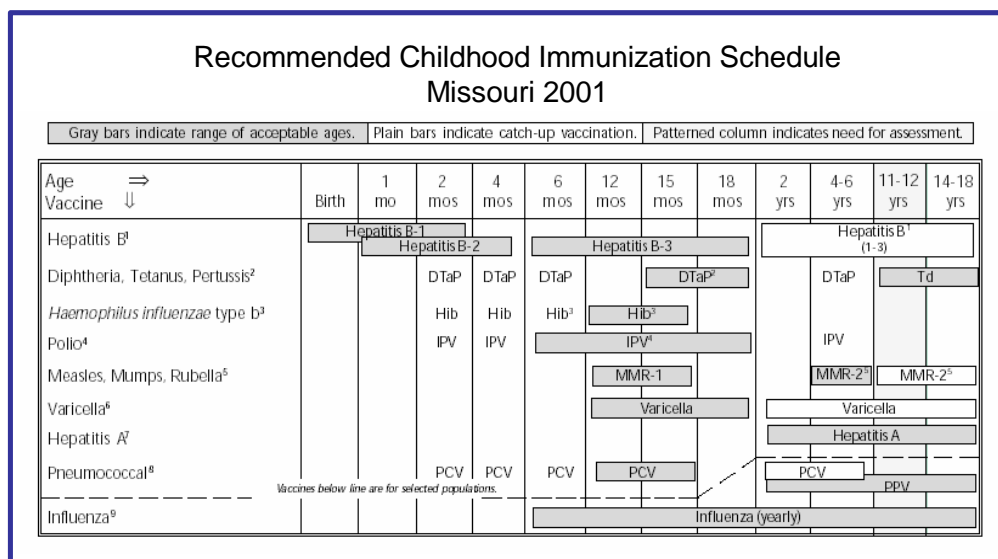
### Immunizations

Over the last two decades, declines in the rates of vaccine preventable diseases have been noted by the Centers for Disease Control and Prevention (CDC). Although the incidence of many of these diseases has decreased significantly, cases of *Varicella* (chickenpox), *H. Influenzae Type B*, *Hepatitis A* and *B*, *Influenza*, *Measles*, *Mumps*, and *Pertussis* were reported in Missouri during CY2000.<sup>33</sup> Continued efforts are thus needed to ensure that outbreaks and resulting increases in morbidity and mortality from these diseases do not reoccur.

The Missouri Division of Medical Services (DMS), recommends that Health Plans immunize children enrolled in MC+ using nationally-recognized medical standards (Centers for Disease Control). Figure 55 diagrams vaccination guidelines for CY2001. DMS makes this schedule and supplementary information available to health care providers and the public on an annual basis, as the CDC releases guidelines for each coming year.

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<sup>33</sup> Missouri Department of Health and Senior Services. (n.d.). *Missouri Morbidity and Mortality Reports of Selected Communicable Diseases- 15 Year Report*. <http://www.health.state.mo.us/CommDis/15yr.htm>. Retrieved August, 2002.

**Figure 55**

Source: Missouri Department of Health and Senior Services, (2001). *Immunizations for Missouri Health Care Providers*.

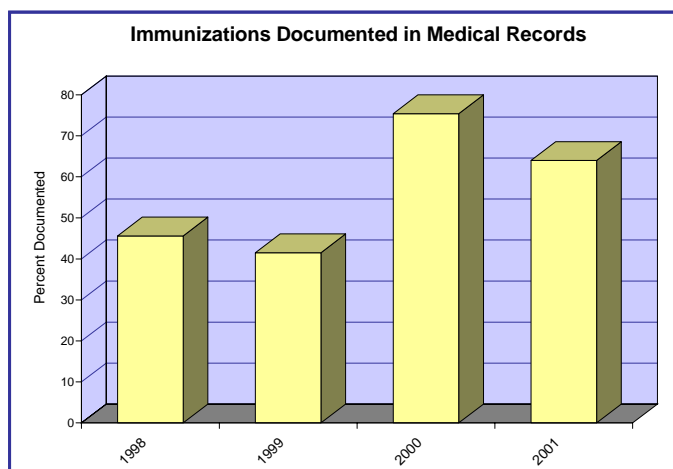
During late CY2001, a number of vaccine shortages occurred, making it difficult for providers in some regions to obtain vaccine orders in sufficient quantities to immunize all children in their practice according to the recommended schedules. Vaccines affected by shortages were *HiB*, *Hepatitis B/HiB* combinations (COMVAX), *Measles, Mumps, and Rubella* (MMR), *Conjugated Pneumococcal Vaccine* (PCV) and *Diphtheria, Tetanus and Pertussis* (DPT). PCV and DPT shortages were severe enough to cause the CDC to issue revised recommendations for the shortage periods although the impacts of these notices are not known at this time. Most delays and shortages are expected to be resolved by fall CY2002.<sup>34</sup>

### EQRO Immunization Evaluation

As part of the CY2001 EQRO evaluation, BHC Inc. conducted a medical record review to determine the degree to which childhood immunizations were documented. Medical records were obtained for 506 children who were six years of age and under, and who were continuously enrolled in the same MC+ Health Plan for at least 12 months. Immunization data elements, including the vaccine type and date of administration, were abstracted from the medical records by registered nurses, using a standard data collection instrument (Appendix B). Consistent with HEDIS indicator methodology, a note that the member was “up-to-date” with all immunizations without a listing of the dates of all immunizations and the names of the vaccines was not considered adequate documentation for reporting purposes. Thus, these cases were not included in the numerators for this study. Appendix A provides additional information to assist in the interpretation of results.

<sup>34</sup> Centers for Disease Control and Prevention. (March 2002). *National Immunization Program: Questions and Answers on Vaccine Shortages*. [http://www.cdc.gov/nip/news/shortages/faqs\\_shortages](http://www.cdc.gov/nip/news/shortages/faqs_shortages).

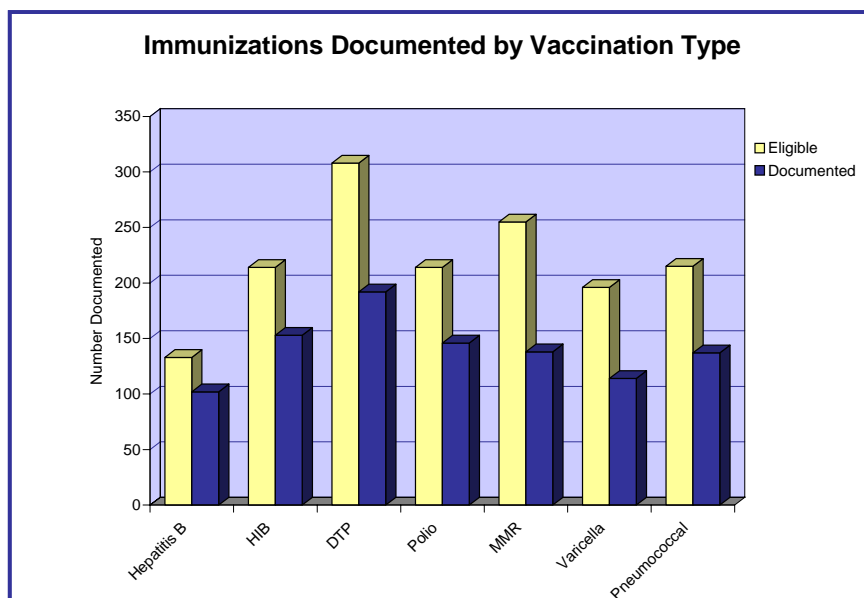
Figure 56 illustrates the aggregate MC+ Health Plan childhood immunization rates as obtained from medical record reviews from CY1998 to CY2001. An MC+ Managed Care Statewide rate of documented immunizations of 64.0% was obtained for CY2001. Rates for CY1998, 1999 and 2000 were reported to be 45.5%, 41.5%, and 75.4%, respectively. The reduction from CY2000 to CY2001 may very well be due to the shortage of available vaccines. Plan-specific rates are shown in Table C34. Considerable variation in Health Plan immunization rates was seen, with a low of 50.0% (Missouri Care) to a high of 82.8% (Mercy Health Plans). As with the EPSDT findings, these results may also have been influenced by small numbers of records available for review in some health plans.



**Figure 56**

Source: BHC, Inc., CY2001 EQRO Medical Record Review, 2002

In addition to the percentage of children who received an immunization, the types of vaccinations that were administered were examined. Figure 57 and Table C35 show the number of immunizations by type, as a proportion of the number expected, based on the age-appropriateness of the children. As seen, DTP showed the highest number of vaccinations.



**Figure 57**

Source: BHC, Inc., CY2001 EQRO Medical Record Review, 2002

### HEDIS Immunization Reports

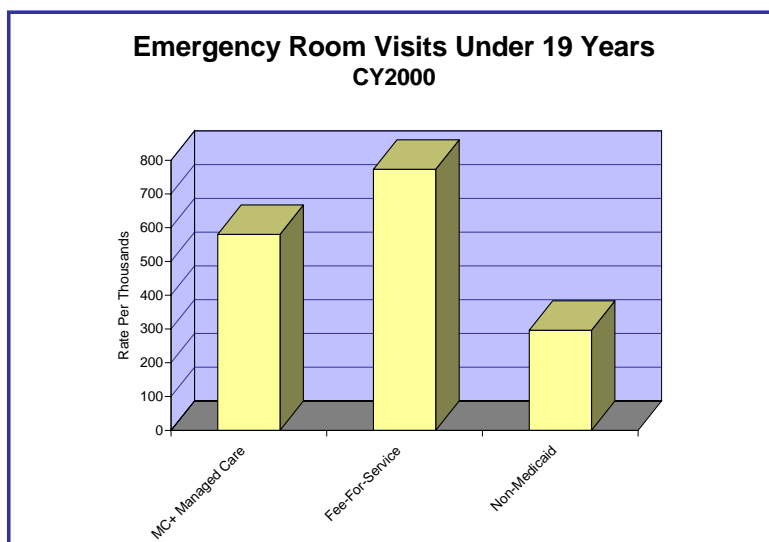
As mentioned previously, despite problems comparing findings from different sources, it is useful to look at the results of different measures, as they provide different types of information. One major source of information important to MC+ Health Plans and DMS is the “HEDIS Childhood Immunization” measure. HEDIS measures for childhood immunization status for two-year-olds in CY1999 and CY2000 showed overall

immunization rates for Missouri MC+ Health Plans at 44% and 48%, respectively. CY2000 plan-specific rates are shown in Table C36. Rates ranged from 34.5% (HealthCare USA, Eastern Region) to 59.6% (Family Health Partners). Statewide commercial averages for CY2000 were reported at 52%. This compared with the National Committee on Quality Assistance (NCQA) Medicaid rate average of 51.3%. These results are not comparable with the EQR findings primarily because of the methodologies used; the main differences being whether single or a series of completed vaccinations were assessed, the data sources, and the age groups being measured. However, as seen with EQR findings, the HEDIS measures show considerable variability from plan to plan and do show improvement over time.

## Health Status of MC+ Beneficiaries

For children, data on utilization of acute care services were examined and compared for children insured under Managed Care, Fee-For-Service, and non-Medicaid sources of payment by the various Regions of the State, for CY2000 (Eastern, Central, Western, Other, and the State overall; see Table C37 and Figures 58 through 59), as an index of health status as well as utilization.

Overall, MC+ Managed Care Members under 19 years of age evidenced the highest rate of asthma hospitalizations in 2000 (5.6 per 1,000) relative to those in Fee-For-Service and Non-Medicaid groups (3.4 and 1.1 per 1,000, respectively). Asthma emergency room visit utilization was also higher for MC+ Managed Care Members than Fee-For-Service and Non-Medicaid individuals (27.5, 13.6, and 5.5 per 1,000, respectively). This may be due to the fact that the Managed Care Regions of the state tend to be more urban, with higher incidence rates for asthma.

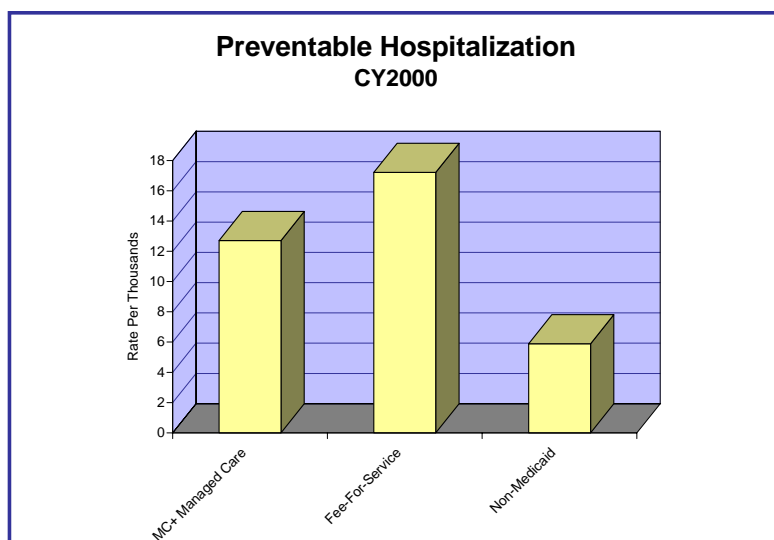


**Figure 58**

Source: Missouri Department of Health and Senior Services, December 2000

For all emergency room visits for children under 19 years of age in CY2000, the rate was lower for MC+ Managed Care Members relative to Fee-For-Service Recipients (580.4 per 1,000 and 773.2 per 1,000, respectively).

The same trend was evident for preventable hospitalizations, with the rate for MC+ Managed Care Members being lower for Fee-For-Service Recipients (12.7 per 1,000 and 17.2 per 1,000, respectively).



**Figure 59**

Source: Missouri Department of Health and Senior Services, December 2000

## Summary

These findings indicate that adult MC+ Managed Care Members and Fee-For-Service Recipients in Missouri report poorer general health status and functional impact of health status than those in the remainder of the State. However, there were no differences between MC+ Managed Care Members and Fee-For-Service Recipients, suggesting that both mechanisms are relatively equivalent in the impact on health and functional status. For children, the rate of hospitalizations was higher in both MC+ groups, relative to the Non-Medicaid groups (Non-Medicaid emergency room visits were 296.4 per 1,000 and preventable hospitalizations were 5.9 per 1,000), likely due to baseline health status and socioeconomic characteristics as well. MC+ Managed Care Members and Fee-For-Service Recipients reported better health and functional status than those who were Uninsured, but there were no significant differences over time in their report of health and functional status.

## Focused Studies

### Prenatal Care Focused Study

Accepted standards of prenatal visit periodicity indicate that prenatal care should begin early and continue throughout the pregnancy. Prenatal care has been reported to predict the subsequent utilization of both maternal and child health services in the postnatal period. Prenatal care consists of four major components: risk assessment, treatment for medical conditions, risk reduction, and education.<sup>35</sup> Each of these components can contribute to reductions in poor natal and maternal outcomes by identifying risks and helping women address issues such as poor

<sup>35</sup> Centers for Disease Control and Prevention. *Pregnancy Risk Assessment Monitoring System (PRAMS) Prevalence of selected maternal and infant characteristics, Morbidity and Mortality Weekly Report*, 48. (November, 1999).



nutrition, smoking, substance abuse, and environmental stressors. Women who had inadequate or no prenatal care had greater infant morbidity and mortality in the postnatal period, and significantly lower levels of maternal postnatal visits, well-child visits, immunization completions, and acute care visits.<sup>1</sup>

The American College of Obstetricians and Gynecologists (ACOG) recommends that women receive at least 13 prenatal visits during a full-term pregnancy. These recommendations include monthly visits for gestation under 28 weeks, every two weeks from 28–36 weeks, and weekly from 36 weeks until delivery.<sup>2</sup> Maternal and Child Health HEDIS Indicators consider adequate prenatal care beginning before the end of the 4<sup>th</sup> month and including at least 5 visits for pregnancies lasting less than 37 weeks, or eight (8) visits for pregnancies of 37 weeks or longer<sup>3</sup>.

DMS defines a prenatal visit as a face-to-face visit with the MC+ Managed Care Member, at which time, all of the following services must be performed<sup>4</sup>:

- Interim history;
- Patient's weight;
- Blood pressure;
- Urine check;
- Fetal heart tone (FHT) attempt; and
- Fundal height.

An evaluation of the adequacy of prenatal care for MC+ Managed Care Members in the State of Missouri was conducted. The first component was a medical record review of the prenatal care received by 134 MC+ Managed Care Members who were identified as being pregnant during CY2001. The evaluation also used secondary data sources and reports to evaluate aspects of prenatal care not available through medical records. Medical records for 134 women with 140 pregnancies were identified for review. For six women who had more than one pregnancy during CY2001, each pregnancy was treated as a separate case. The following sections describe the medical record review findings and related information from secondary sources:

- Demographic information (age, race, marital status);
- Types of prenatal visit activities;

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<sup>1</sup> Texas Medicaid Managed Care. 2000 STAR Pregnancy Focused Study Final Technical Report, December 4, 2000 (corrected version January 26, 2001).

<sup>2</sup> Chan, P.D., and Winkle, C.R. (2002). *Gynecology and Obstetrics*, Current Clinical Strategies Publishing, Laguna Hills: CA.

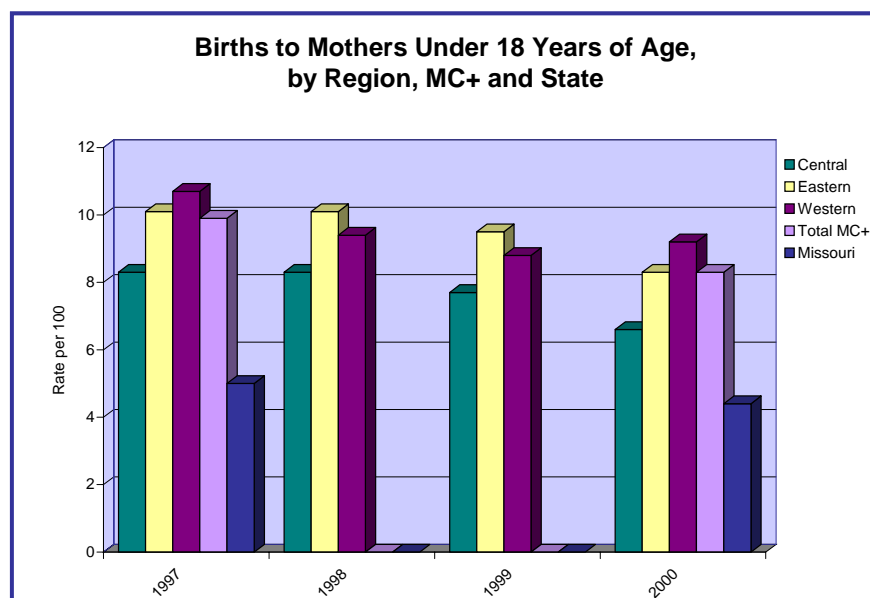
<sup>3</sup> Missouri Department of Health and Senior Services, HDA/CHIME. *HEDIS Indicator by Missouri Medicaid Managed Care Plans within Regions: 2000 Live Births*, June 26, 2001.

<sup>4</sup> Department of Social Services, Division of Medical Services (November 2001), Physicians Manual.

- Pregnancy risk assessments;
- Initial laboratory assessments;
- Nutrition assessments and interventions;
- Smoking status and interventions;
- Substance abuse status and interventions;
- Complications of this pregnancy;
- Delivery information (if the woman delivered during the study period and documentation was available); and
- Number and Dates of prenatal visits.

### Demographic Information

The average age of pregnant women included in the medical record review at the first documented prenatal visit for those cases was 22.7 years, with a range of 16.8 years to 39.7 years. Eight (5.8%) of the women were age 18 years or less, and five (3.5%) were age 35 years or older. Age is an important variable, as preterm deliveries, caesarean deliveries, low birth weight infants, and macrosomia have been reported to occur more frequently among adolescents.<sup>5</sup>



**Figure 60**

Source: Missouri Department of Health and Senior Services, HDA/CHIME, June 26, 2001.

health plans reporting a low of 5.1 (Mercy) to a high of 10.4 births to mothers under 18 per 100 births (Family Health Partners). Regional rates varied from 6.6 per 100 in the Central Region to 9.2 per 100 in the Western Region. The MC+ Managed Care rate of 8.3 per 100 compared to the State rate of 4.4 per 100 shows that the rate of mothers under the age of 18 among MC+ Managed Care Members was nearly twice that of the general population.

Information provided by the Missouri Department of Health and Senior Services (DHSS) shows that in the year 2000, 8.3 per 100 births occurred in mothers under the age of 18; a decrease from 9.9 per 100 in 1998. These data are summarized in Figure 60 and described by Health Plan in Table C38. There was considerable variation from plan to plan, with

<sup>5</sup> Texas Medicaid Managed Care. *2000 STAR Pregnancy Focused Study Final Technical Report*, December 4, 2000 (corrected version January 26, 2001).

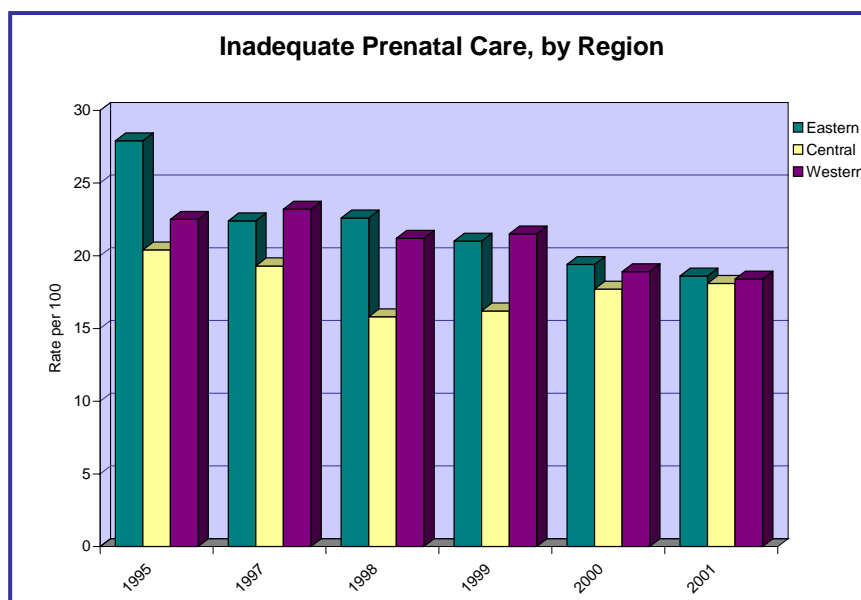
Of the women for whom race was reported in the medical records, 69 (49.3%) were documented as White; 33 (23.6%) as African-American; and 2 (1.4%) Hispanic/Latino; 1 (0.7%) Asian; and 35 (25.0%) as Unknown or Not Documented. A majority of the women for whom marital status was documented in the records, 76 (54.3%) were Single. Thirty-six (31.0%) of the women were indicated as Married; and three divorced or separated (3.4%).

### Adequacy and Timing of Prenatal Care

The sampling and medical record review design did not allow for assessment of the adequacy of prenatal care in terms of following individuals through an entire pregnancy, as only CY2001 records were requested for review and many pregnancies overlapped from the previous or subsequent calendar years. However, data on the timing of initiation and frequency of prenatal visits of women enrolled in MC+ were available from the previous MC+ EQR, Maternal and Child Health (MCH) and Missouri Department of Insurance (MDI) reports. The following paragraphs briefly outline findings from these sources to provide a summary of the adequacy of prenatal care of Medicaid recipients by region, and the State.

The 2000 MC+ EQR report used Missouri birth certificate data and reported that in CY2000, 53% of women across all MC+ Health Plans reported between 11 and 20 prenatal visits, while 89.7% had up to 30 visits in CY2000.

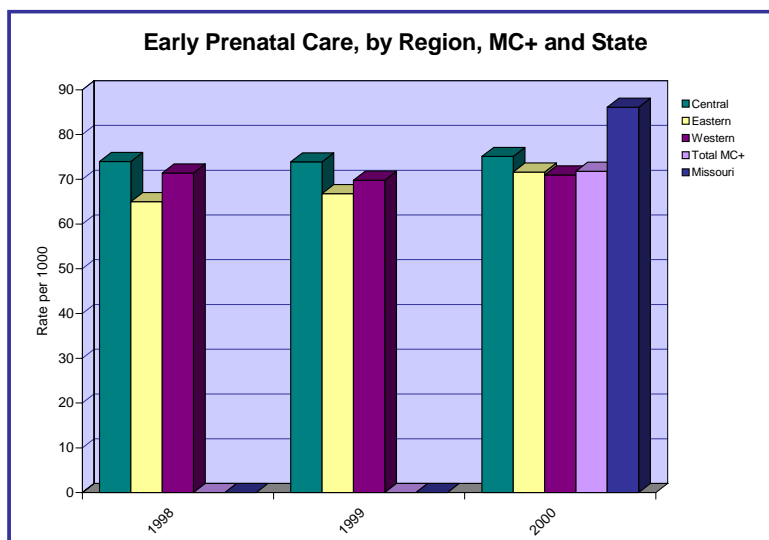
MDI/DMS data for CY2001 (based on Health Plan reports) indicated rates of inadequate prenatal care of



**Figure 61**  
Source: Missouri Department of Insurance, 2001

18.6%, 18.1%, and 18.4% for the Eastern, Central, and Western regions, respectively. As seen in Figure 61, the rate of inadequate prenatal care declined, although the Central Region returned to near the 1995 baseline after a temporary decrease.

In addition to monitoring the frequency of prenatal care, the DHHS and DMS also monitor rates of early prenatal care. Provisional MCH data provided by DMS/DOI for CY2001 showed that 79.2%, 77.6%, and 78.9% of women received prenatal care during the first trimester for pregnancy in the Eastern, Central and Western regions, respectively (Figure 62).



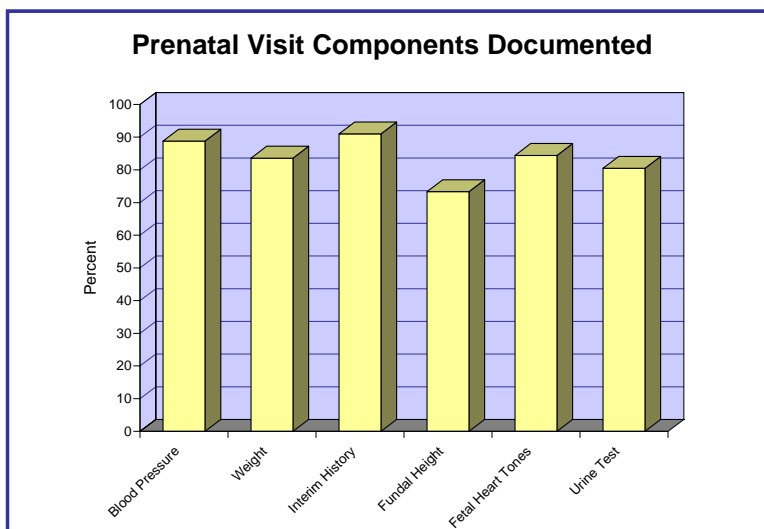
**Figure 62**

Source: Missouri Department of Health and Senior Services, HDA/CHIME, June 26, 2001.

### Types of Prenatal Visit Activities

Required components of a prenatal

visit include an interim history, weight, blood pressure, urine check, fetal heart tone (FHT) attempt, and fundal height. Activities a medical record review of 6,221 prenatal visits was assessed. As seen in Figure 63, documentation of the required prenatal visit components was very good, ranging from 73.3% to 91.0%. The least frequently documented component was that of fundal height. It was noted that those facilities using a standard form, such as the ACOG Antepartum Record, were most likely to have this element documented.



**Figure 63**

Source: BHC, Inc., Medical Record Review, 2002

Note: Only those pregnancies of 12 weeks or greater gestation were included as eligible for fundal height and fetal heart tone measurements.

### Perinatal Risk Assessments

The medical records were also reviewed to determine whether perinatal risk assessments had been performed and documented. The review revealed that in 59 cases out of 140 pregnancies (42.1%), a pregnancy risk assessment had been conducted. It was noted during the course of

review that some women appeared to have risks, but the assessment form stated there were no risks. For purposes of the evaluation, only risks identified by the provider were included. Provider-identified risks were documented for 24 women (40.7% of women with a completed risk assessment form). The types of risks are outlined in Figure 64.

**Perinatal Risk Assessments, CY2001**

| Risk Category                                | # Cases | % Cases | Problem/Risk  |
|--|---------|---------|---|
| Pregnancy-related History or Circumstances   | 16      | 11.4%   | Late Entry into Care (5)<br>Spontaneous Abortion (1)<br>Multigravida (1)<br>Multiple Birth (1)<br>Previous Pregnancy within One Year (1)<br>Preterm Birth (2)<br>Prior Premature Labor (2)<br>Previous Fetal Death (1)<br>Surgically Scarred Uterus (1)<br>Under Age 17 Years (1) |
| Medical Condition(s)                         | 6       | 4.3%    | Anemia (1)<br>Asthma (1)<br>Autoimmune Disorder (1)<br>Gestational Diabetes (1)<br>Sickle Cell Trait (2)  |
| Mental/Emotional/ Substance Abuse Conditions | 22      | 15.7%   | Depression (4)<br>Chronic Mental Health Condition (1)<br>Bipolar Disorder (1)<br>Drug Abuse (6)<br>Alcohol Abuse (1)<br>Smoking (9)   |
| Living and Other Situations                  | 11      | 7.8%    | Single/living alone (6)<br>Abuse (2)<br>Poor Environment (1)<br>Homeless (1)<br>DFS Custody of 2 Children (1)   |

**Figure 64**

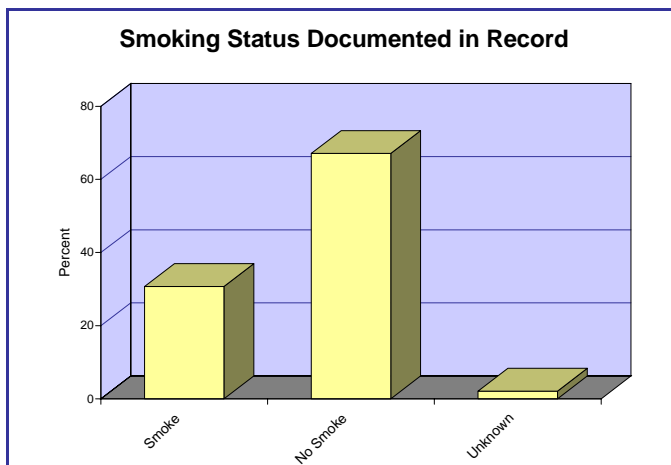
Source: BHC, Inc. Medical Record Review, 2002

### Assessment for Smoking and Substance Abuse

Substance abuse and smoking prevalence in the prenatal sample was assessed by reviewing the medical records for documentation of such use. Substance abuse, including tobacco, alcohol and other drugs, has been shown to contribute to fetal morbidity and mortality. Smoking during pregnancy is linked to 20–30% of low birth weights and 10% of infant and fetal deaths.<sup>6</sup>

<sup>6</sup>Texas Medicaid Managed Care (December 4, 2000). *2000 STAR Pregnancy Focused Study: Final Technical Report* (Corrected Version, January 26, 2001).

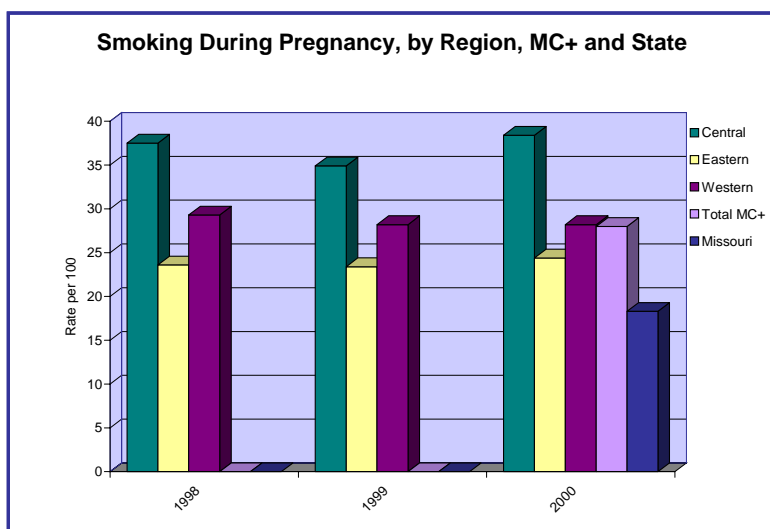
The 2001 EQR medical record review found that a third of the pregnant women had documentation in their medical record indicating that they smoked cigarettes, although a number reported they decreased the amount they smoked or quit. As shown in Figure 65, a total of 43 (30.7%) of the records had documentation indicating the woman smoked; 94 (67.1%) of the records indicated that the woman did not smoke and three (2.1%) did not have information regarding smoking status. A total of 484 cigarettes/day were documented for pre-pregnancy for 31 women who reported both a pre-pregnancy and a pregnancy smoking amount. The mean pre-pregnancy amount of cigarettes per day was 15.6; the pregnancy amount was 8.2. Six records of the 43 records (14%) indicated the women reported they had stopped smoking. Nineteen (44.2%) of the records indicated the woman had been counseled to stop smoking. One was referred to a smoking cessation program. No other smoking cessation interventions were documented. Table C40 shows the rates of smoking and counseling by health plan. None of the plans had enough participants in this sample to draw individual conclusions.



**Figure 65**

Source: BHC, Inc., Medical Record Review, 2002

Figure 66 and Table C41 show the MCH HEDIS measures are consistent with the medical record review findings. There has not been substantial change in the smoking status in the three years reported (1998–2000). Also observed is that MC+ Managed Care Members have a higher rate of smoking during pregnancy (28.0 per 100) than Missouri as a whole (18.3 per 100). FirstGuard Members had the lowest rate, with 21.0 per 100 while Care Partners Members had the highest rate, at 42.2 per 100 women.



**Figure 66**

Source: Missouri Department of Health and Senior Services, HDA/CHIME, June 26, 2001

The rate of smoking is further documented by WIC prenatal statistics for the State of Missouri.

The WIC screenings indicate that in CY2000, 28.0 per 100 of prenatal women smoked during the seven days prior to the screening. A further breakdown was provided indicating the rate for “Medical Temp at Review” was 30.8, and “Medicaid Pending Review” was 33.7 and a non-Medicaid rate of 22.2 per 100.

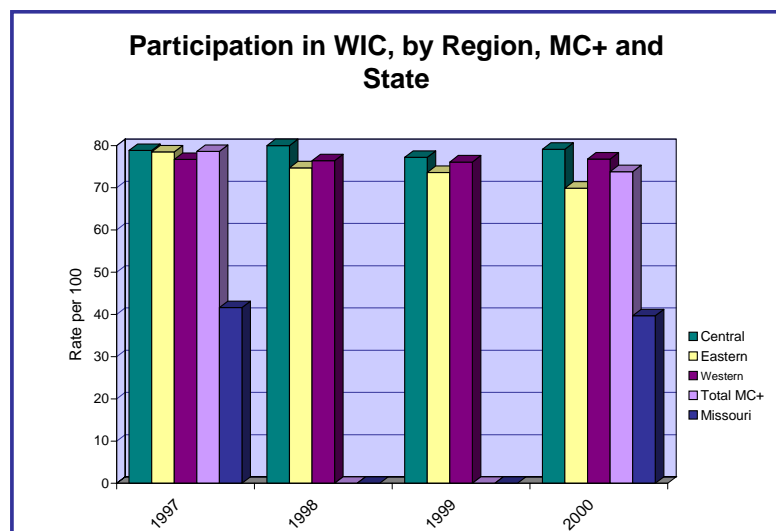
### Substance Abuse Status

The 2001 EQRO medical record review showed that a total of 13 women (9.3%) had documented substance abuse prior to the pregnancy or during the pregnancy. Of the substances that were abused, marijuana was the most frequently reported abused substance, with 12 of the 13 women (92.3%) using this drug either prior to or during their pregnancy. Two women (15.4%) also reported cocaine/crack cocaine use along with the marijuana. One woman abused alcohol and amphetamines in addition to the marijuana. Two (15.4% of those who reported substance abuse) women were referred to a substance abuse program such as C-STAR.

### Nutritional Assessments

Seven of the 140 cases (5.0%) that were reviewed indicated the women had a nutritional problem. Of the three cases for which a description of the problem was provided, one beneficiary had a feeding tube, one had weight loss, and one was overweight. Weights were documented as part of the prenatal visit assessment. Of note was that 16 of the 83 women (19.3%) for whom initial weights were available were between 200 and 299 pounds, suggesting possible nutritional problems that were not documented in the risk assessments. One woman (1.2%) was less than 95 pounds at the first documented visit. Pre-pregnancy weights under 95 pounds are often considered risk factors, and should be included in risk assessments.

A total of 35 (25.0%) women had documentation of either being referred to or enrolled in the WIC program. Four (2.8%) women were also referred to a nutritional program. The medical record rate for WIC participation is lower than that reported by DHHS, which indicated a rate of 73.8 per 100 for MC+ Managed Care Members and 39.7 per 100 for the state as shown in Figure 67. Statistics reported for CY2000 indicate referrals to WIC ranged from 60.7 per 100 (Mercy) to 81.1 per 100 (Blue Advantage Plus).



**Figure 67**

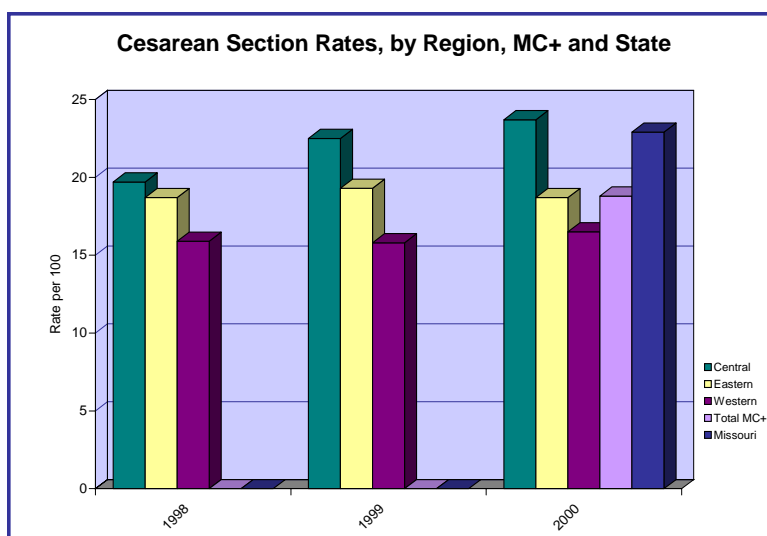
Source: Missouri Department of Health and Senior Services, HDA/CHIME, June 26, 2001

### Complications During This Pregnancy

Twenty-four (17.0%) of the women in the medical record review had documented complications during the pregnancy, with a mean of 1.3 complications per woman. None of the women had more than two complications listed. Four (2.9%) of the women were reported to have experienced trauma during the pregnancy, six (4.3%) had documented anemia, six (4.3%) had documented hypertension, two (1.4%) had gestational diabetes, four (2.9%) experienced bleeding in the second half of the pregnancy, and eight (5.7%) had spontaneous abortions. Only two (1.4%) women had documented infections. One case of a non-viable home delivery at greater than 20 weeks was documented.

### Delivery Information

Thirteen of the 140 (9.3%) pregnancies reviewed had an associated delivery during CY2001. Of these, one was a non-viable home delivery at 24 weeks gestation. Of the twelve live births, nine (75.0%) of the deliveries were vaginal; three (25.0%) were via caesarean section. As a comparison, rates from the DHSS indicate caesarean rates of 18.8 per 100 live births for MC+ Managed Care Members and 22.0 per 100 for the State. CY2000 rates for



**Figure 68**

Source: Missouri Department of Health and Senior Services, HDA/CHIME, June 26, 2001

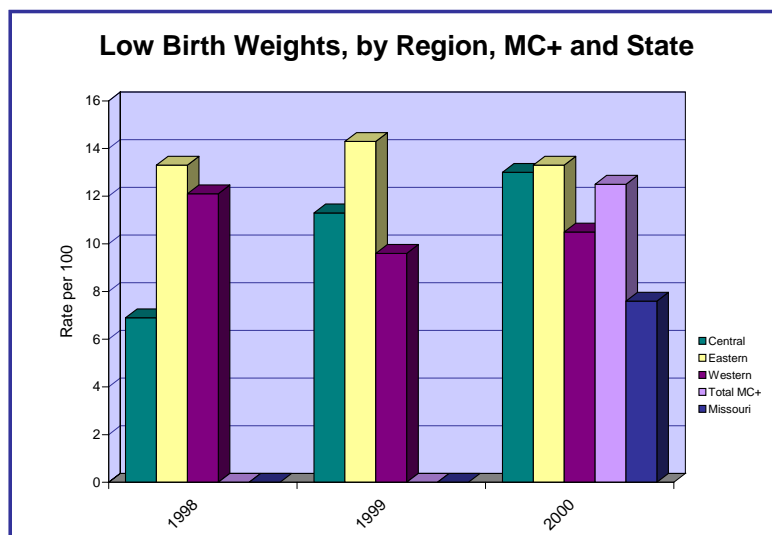
individual health plans ranged from 16.4 per 100 (HealthNet) to 25.7 per 100 (HCUSA Central). A second source reported a Managed Care cesarean section rate of 22.9% for the year 2001.<sup>7</sup> Figure 68 shows rates by Region, MC+ and State. Plan specific rates are provided in Table C42.

All twelve live singleton deliveries during the study period had recorded birth weights over 6 pounds, and had 5-minute Apgar scores of 8 to 10, indicating positive birth outcomes in terms of weight and vital capacities. By means of comparison, DHSS information indicated that in the year 2000, 12.5% of MC+ Managed Care births had low birth weights (under 2500 Grams). Rates for MC+ Health Plans ranged from a low of 4.8 per 100 for Care Partners (Central) to a high of 19.1 per 100 for Missouri Care for that year. Figure 69 illustrates the CY2000 rates per Region and

<sup>7</sup> Missouri Department of Health and Senior Services. (August 30, 2002). *WIC Prenatal Statistics for the State of Missouri*, <http://www.dhss.state.mo.us>.



total MC+ Managed Care population. Table C43 provides plan-specific rates.



**Figure 69**

Source: Missouri Department of Health and Senior Services, HDA/CHIME, June 26, 2001

Note: Among women continuously enrolled for 12 months prior to delivery (a gap of up to 45 days was allowed)

## Summary

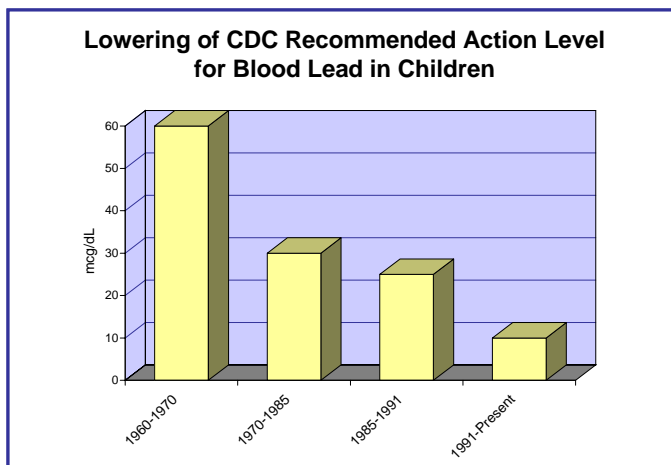
An average of 79.2%, 77.6% and 78.9% of MC+ Managed Care women in the Eastern, Central and Western Regions respectively, initiated prenatal care during the first trimester, the period during which vital fetal development is occurring and a healthy lifestyle and medical care is essential. Medical records reviewed showed good compliance in documenting required prenatal care components, including an interim history, weight, blood pressure, fetal heart tones, fundal height, and urine testing. The prevalence of complications during the pregnancy documented in the medical record was low compared to national estimates. Approximately one-third of the women smoked during the pregnancy, as observed in the medical record review. Inadequate documentation of consultation and smoking cessation efforts was found in most medical records, and specific advice and/or interventions were often not documented. MDH and MDI data supported the smoking rates, and additionally show that little progress has been made in decreasing smoking rates over the past four to five years. Based on these findings, smoking cessation must continue to be a major priority for health plans and their providers. Providers may consider focused review of smoking in their prenatal populations and implementing smoking cessation projects.

## Lead Screening Focus Study

Lead poisoning is a serious public health problem nationally and in Missouri. The Centers for Disease Control and Prevention (CDC) report approximately one million children younger than 6 years of age in the United States have blood lead levels of at least 10 µg/dL, a level high enough

to adversely affect their intelligence, behavior and/or development<sup>8</sup>. The key to prevention and early intervention of lead poisoning rests with screening those populations at risk. The General Accounting Office (GAO) reported in its widely distributed 1998 study that the prevalence of lead poisoning in children who were enrolled in Medicaid was nearly five times that of non-Medicaid children. In addition, the study found that 60% of all children with lead poisoning (i.e., blood lead levels greater than 10 µg/dL), and 83% of all children with blood lead levels greater than 20 µg/dL were enrolled in Medicaid<sup>9</sup>. This finding makes lead screening especially important for Missouri and national Medicaid Agencies.

To assist health care practitioners and public health agencies screen, monitor, and treat children for potential lead poisoning, the CDC has provided guidelines for action levels in children. As research regarding the effects of lead poisoning at various levels has been published, the CDC has markedly decreased the recommended action levels for blood lead in children<sup>10</sup>. This change is illustrated in Figure 70.



**Figure 70**  
Source: Centers for Disease Control, 2002

### Screening Children for Lead Poisoning

In response to state surveillance activities and these recommendations, a number of monitoring and evaluation programs have been implemented in Missouri and nationwide. Among these is monitoring of Lead Screening by the EQRO as part of the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) Program.

Testing, treatment and prevention of access to lead hazards are key elements to finding and, ultimately, eliminating childhood lead poisoning. Because lead poisoning is often a result of continued exposure to lead with a gradual accumulation in a child's body, signs and symptoms of toxicity often mimic other problems and may not be detectable until a dangerous blood lead level is reached. Children with low levels of lead poisoning often do not appear acutely ill, and the condition may not be noted by the parent and/or physician.

<sup>8</sup> Centers for Disease Control and Prevention. (December 8, 2000). *Recommendations for Blood Lead Screening of Young Children Enrolled in Medicaid: Targeting a Group at High Risk*, Vol 49, No. RR14:1.

<sup>9</sup> United States General Accounting Office, Health, Education, and Human Services Division. (February, 1998) *Medicaid: Elevated Blood Lead Levels in Children*, GAO/HEHS-98-78.

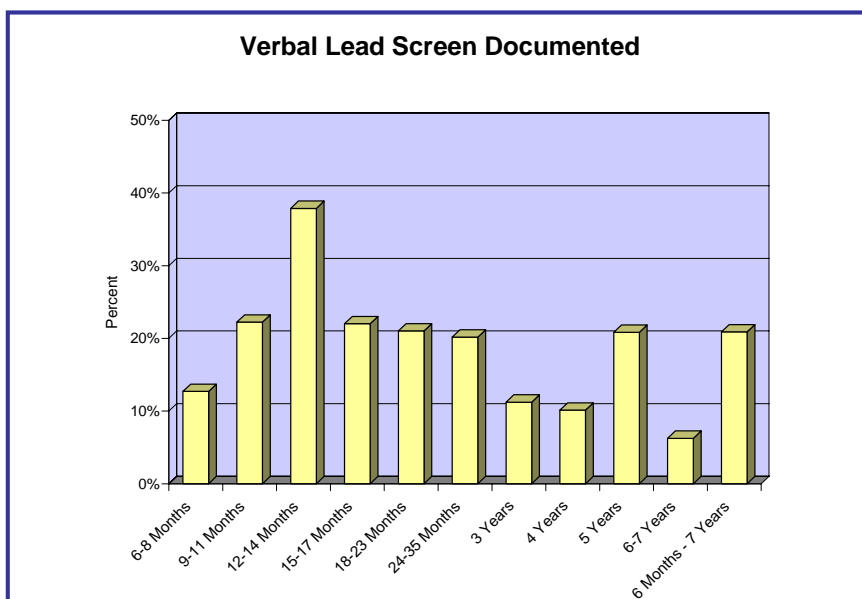
<sup>10</sup> Centers for Disease Control and Prevention. (September, 2002). *Case Studies in Environmental Medicine (CSEM): Lead Poisoning*, <http://www.atsdr.cdc.gov:5555/HEC/CSEM/lead/>.

Lead screening for Missouri Medicaid consists of two activities. The first is an oral screen (verbally-administered questions indicating risk of exposure) administered to all children six through 72 months at the time of the EPSDT visit. The Division of Medical Services (DMS) has provided a standard form for provider use in administering the questionnaire and documenting screening and blood levels (Appendix B). The second method of screening is through a blood laboratory test. This test is to be administered at 12 and 24 months of age or if a “positive” response is obtained on the verbal questionnaire. The blood lead level (BLL) screening is a simple procedure that can be conducted in many physician offices, public health clinics, or other primary care sites. It typically requires that a blood sample be collected from a child through a venipuncture. The blood is then analyzed by a laboratory (in-house or at an outside accredited facility). A capillary (fingerstick) blood sample may also be used, but the procedure occasionally results in false positive readings. Any elevated BLL found through this method is to be validated by the venipuncture method. DMS and the Missouri Department of Health and Senior Services issued a “Missouri Medicaid Bulletin” in December 2000 that gives health care providers information regarding the screening requirements and available resources.<sup>11</sup>

#### Mandatory Oral Lead Risk Assessment

In Missouri, all children enrolled in Medicaid who are between the ages of six and 72 months must receive a verbal lead risk assessment (oral screen) as part of the EPSDT/HCY screening. As risks are subject to change, subsequent risk assessments could change a child’s risk category and subsequent interventions or follow-up. If the answers to all questions on the screen are negative, the child is generally not considered to be at-risk for a high degree of lead exposure. However, if the answer to any question is “yes”, a child should be considered at-risk for high doses of lead exposure, and a blood lead level must be drawn.

The MC+ EQRs have been monitoring lead screening compliance rates as part of the MC+ Health Plan evaluation. As in previous years, the documented rates remain low, with a CY2001 rate of 20.9% (see Figure



**Figure 71**

Source: BHC, Inc., EQRO Medical Record Review, 2002

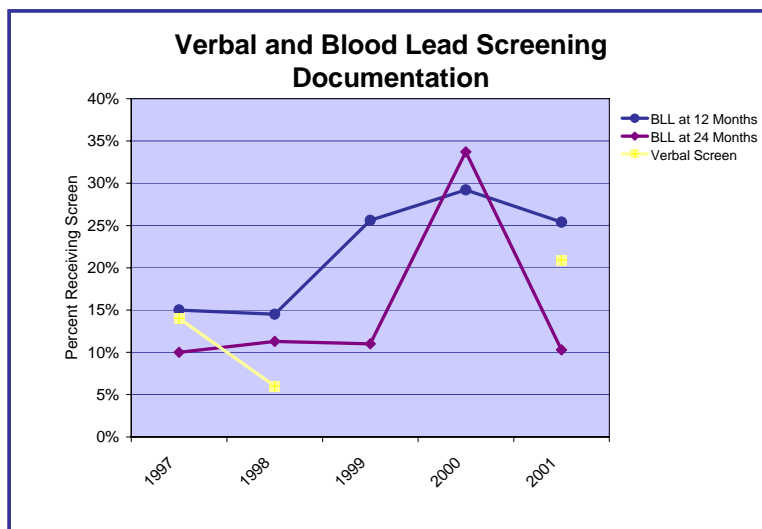
<sup>11</sup> Missouri Department of Social Services. (December 22, 2000). *Missouri Medicaid Bulletin: Special Bulletin, Vol. 23, No. 8*, <http://www.dss.state.mo.us/dms>.

71). A total of 1,130 tests were indicated for 506 children for whom medical records were reviewed. Of these, 236 lead screenings were identified in the medical records, providing a documentation rate of 20.9% across all MC+ Health Plans. The highest rate of documentation was among the 12- to 24- months age group (37.9%), with the lowest rate for the six to seven year old age group (6.3%). Just over a third of the medical records (36.4%) contained the DMS Lead Risk Assessment form to document the screenings.

### Mandatory Blood Lead Level Screening

The second lead screening activity, that of measuring the amount of blood lead via a laboratory procedure has also been evaluated by the EQR over the past four years. The State of Missouri requires that blood lead levels be performed at age 12 months and 24 months, or if one or more “positive” responses are obtained on the verbal questionnaire. The HCFA-416 EPSDT Participation Report indicated that, in Missouri, a total of 24,605 blood lead tests were performed during FFY2000<sup>12</sup>.

The Missouri MC+ EQR has conducted medical record review since 1997 and obtained rates for documented blood lead tests at 12 and 24 months of age. In addition, completion of verbal screening for lead exposure risk factors was assessed in CY1998, 1999 and 2001. Figure 72 illustrates these rates, and shows that overall documentation remains well below the benchmarks set in 1998 (i.e., 40% and 25% for the 12 and 24 month age groups, respectively). A total of 177 cases and 97 cases were reviewed for the two groups of children in CY2001. Of these, 45 (25.4%) and 10 (10.3%) had documented blood lead levels. Only two cases had an elevated blood



**Figure 72**

Source: BHC, Inc., Medical Record Review, 2002

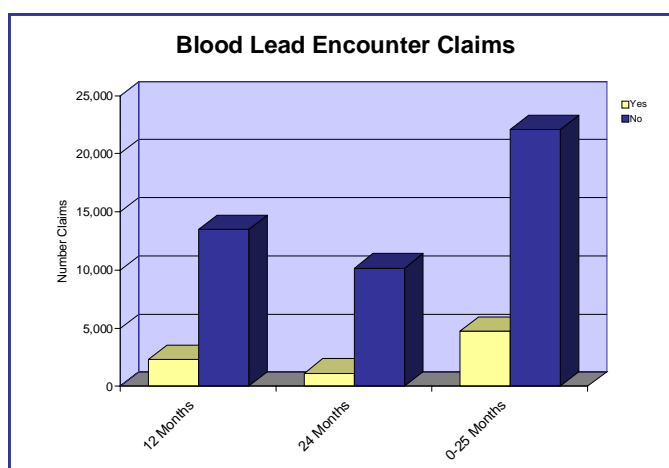
lead value (one 13 µg/dL and one 22 µg/dL, both of which were within normal ranges upon follow up testing). One child was 17 months of age, the other 14 months of age at the time the elevated level was detected. Additional information regarding these rates and breakdowns by health plan are included in Tables C53 and C54.

<sup>12</sup> Missouri Department of Social Services, Division of Medical Services. (2001) *Annual EPSDT Participant Report. HCFA Form 416 (5-90). State MO FFY2000.*

These findings are consistent with previous EQR findings with the exception of CY2000, which appears to have an aberration in the 24 month BLL. The low rates are consistent with the 1998 GAO report that highlighted Medicaid billing data from 1994 to 1995 that showed that only 18% of all Medicaid children had received a lead toxicity screening.<sup>13</sup> Calendar year 1999 data for Missouri showed that there were 46,715 children under the age of six tested for lead, which accounted for 10% of the estimated child population.<sup>14</sup>

### Encounter Data Validation of Blood Lead Levels

Encounter claims provided by DMS were queried for the occurrence of blood lead tests drawn during CY2001. The Current Procedural Terminology (CPT-4) code “83655” was used to identify those procedures defined as blood lead tests. Figure 73 shows the number of claims for those children 12 months of age ( $\pm 1$  month), 24 months of age ( $\pm 1$  month), and all children 25 months of age or younger. As seen, 14.5% of children age 12 months and 10.0% of children age 24 months had encounters for blood lead levels. This compares with 25.4% and 10.3% observed in the medical record review. An additional 1,359 children had claims for blood lead tests outside of the 12 and 24 month observation periods.



**Figure 73**

Source: DMS Encounter Claims Database, February 2001

Encounter claims for children identified to be 12 months of age during CY2001 were also compared to blood lead screening documented in the medical records to determine whether the encounter claims were sufficient to estimate blood lead screening rates. A database of 5.9 million encounters with service dates in CY2001 was queried for the blood lead procedure code. The result of this query was then compared to the result of the medical record review. The comparison found that neither medical records, nor encounter claims were complete. Of 41 cases for which an encounter claim was present, 21 had supporting medical record documentation; 20 (48.8%) cases did not have medical record documentation of cases from which medical records were available. Another 22 cases had documentation in the medical record, but there was no associated blood lead encounter claim.

### Provider Practices and Opinions Survey

<sup>13</sup> United States General Accounting Office, Health, Education, and Human Services Division. (February 1998). *Medicaid: Elevated Blood Lead Levels in Children*. GAO/HEHS-98-78.

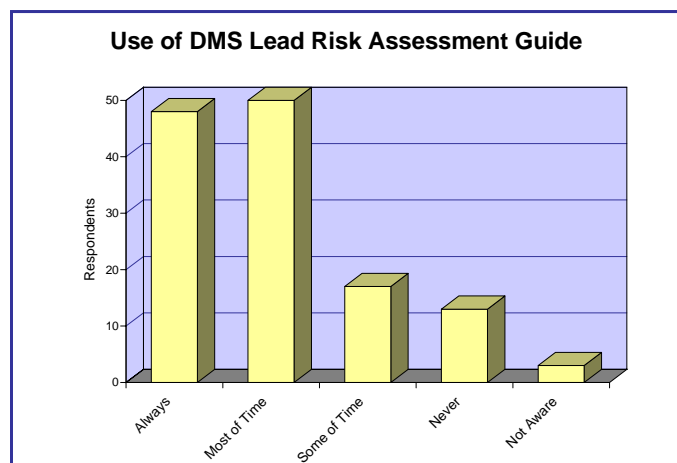
<sup>14</sup> City of St. Louis, Department of Health, Childhood Lead Poisoning Prevention Program. (1999) *Childhood Lead Poisoning Annual Report*.

To assess the opinions and practices of providers in regard to lead screening, a one-page survey with seven questions was mailed to providers from whom pediatric medical records were being requested. Providers were asked to estimate the number of children in their practice referred for blood lead testing, their use of the Department of Health Lead Risk Assessment Guide, and their opinion regarding blood lead screening policies (Appendix B). A self-addressed, postage paid envelope was included in the request packet to encourage higher response rates.

A total of 143 providers (22.0% of 650 mailed) returned completed lead survey forms. Of these, twenty indicated they were specialists or provider types that did not routinely provide well-child services. Of the remaining 123 respondents, information about practices and opinions regarding childhood lead screening was compiled and summarized. The following summarizes the survey findings. Survey methods are outlined in Appendix A.

**Number of Children in Practice.** One hundred two (102) providers reported a total of 67,443 children in their practices. The median was 300 children, with a range of six to 6,625. The range suggests respondents included both individual providers as well as large, institutional, multi-practitioner providers. Five (5) providers indicated that the number of children under age two was unknown.

**Use of DMS Lead Risk Assessment Guide.** Of the 122 providers responding to this question, 96 (78.7%) stated they use the Missouri Department of Social Services Lead Risk Assessment Guide all or most of the time (see Figure 74). Seven (5.7%) stated they never use the Guide, and two (1.6%) stated they were not aware of the Guide. Of interest is that this finding does not correspond with medical record review findings in which only 36.4% of the records had documented use of the form. On the positive side, this response indicates the providers are aware of the form and, therefore, presumably, the lead screening requirements.



**Figure 74**

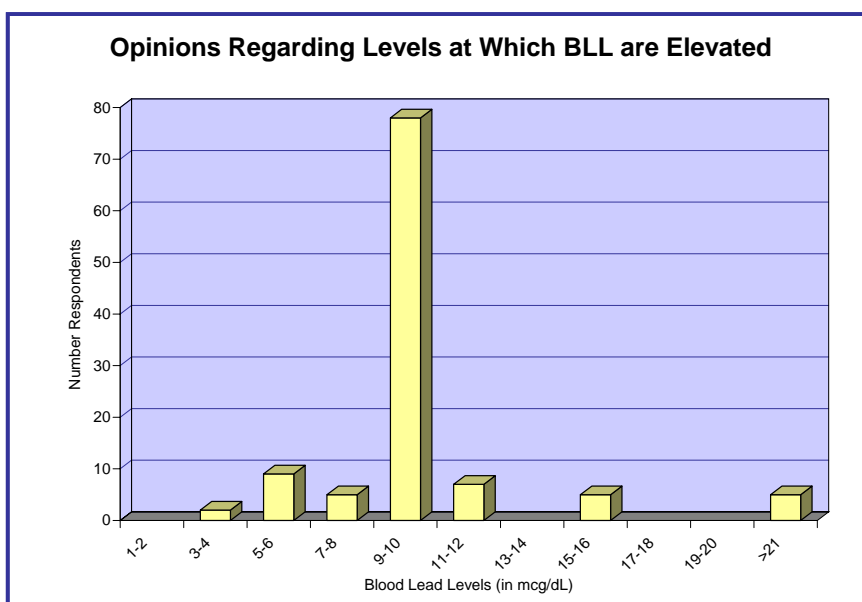
Source: BHC, Inc. (2002), Provider Lead Screening Practice Survey

**On-Site Phlebotomist.** Not having an on-site phlebotomist has been cited as a potential barrier to obtaining blood levels. Of the 122 respondents for this question, 54 (44.3%) indicated they had this service available on site; 68 (55.7%) did not. When asked what they thought were the major reasons for blood screening not occurring at 12 and 24 months of age, 17 (13.9%) of the providers indicated one of the reasons was lack of transportation to an off-site laboratory, as a result of a member having to make an appointment with another health care provider. Use of

alternatives to venapuncture (e.g. capillary devices, filter paper) may be an opportunity for office staff and/or provider education.

**Knowledge and Opinion of Elevated Blood Lead Levels.** Providers were asked what blood lead level they considered to be elevated. The 111 providers who responded to this question listed values ranging from 3 to 50 µg/dL. Seventy-four respondents (66.7%) indicated they would consider a BLL over 10 µg/dL as elevated. Four (3.6%) responses indicated a level of 30.0 µg/dL would be considered elevated, as shown in Figure 75.

Potential reasons for the higher levels might be due to the fact that the CDC has significantly lowered its threshold, or that the providers may not be making a distinction between child and adult action levels. Also, some providers indicated follow-up at levels lower than those recommended by the CDC. Although some children may be at-risk with levels under 10 µg/dL, this could also result in unnecessary follow-up services.



**Figure 75**

Source: BHC, Inc, Provider Lead Screening Practice Survey, 2002

**Venous Blood Procedures.** Providers were asked to indicate under what circumstances they conduct venous blood lead levels. Responses focused on two different interpretations to the question (1) for whom and under what circumstances blood lead screening was conducted and (2) the method of obtaining the blood level (i.e, capillary vs. venous). Overall, providers indicated that venous blood levels were drawn based on age, elevated capillary test results, and the presence of risk factors based on verbal screening. Some providers stated they routinely obtain venous levels rather than capillary samples. Individual responses regarding reasons for drawing venous blood are provided in Figure 76. As the survey was anonymous, plan level breakdown of comments are not available.

| Circumstances for Drawing Venous Blood  |   |
|---|---|
| <ul style="list-style-type: none"> <li>Ages 12 and 24 months</li> <li>Routinely for all children under 6 yrs or for high risk</li> <li>Medicaid children at 12 months</li> <li>Routinely at 1 &amp; 2 years old, earlier if positive risk factors</li> <li>Any child age 6 months - 6 years by parent request</li> <li>By referral, with EPSDT screens - age appropriate</li> <li>Required screening</li> <li>Confirmation of a capillary lead level greater than 10</li> <li>Blood lead greater than 15 mcg</li> <li>Elevated capillary lead level</li> <li>If previous elevation or sibling elevation (multiple responses)</li> <li>Toxicology Screening</li> <li>If patient has symptoms and has had contact with lead or reason to suspect contact</li> <li>When history suggests it is warranted</li> <li>MR, seizures, ADHD, pain anemia</li> <li>When I have to do the CBC</li> <li>Positive questionnaire, + exporate Hirtag-Medicaid</li> <li>Decreased alertness, memory, increase manic, delirium, cerebral edema, seizures, coma</li> <li>Household contact with EBL, high risk area - suspected elevation</li> </ul> | <ul style="list-style-type: none"> <li>Persistent abdominal cramping and vomiting PICA, rehab old home</li> <li>Positive answer on lead questionnaire</li> <li>Child's environment, (lifestyle, home life)</li> <li>Parental concern of increased lead levels</li> <li>We do all tests venous</li> <li>Try to do venous, only capillary if unable</li> <li>Phlebotomist preference or concurrent lab tests</li> <li>Routinely do venous. Capillary done if venous not obtainable</li> <li>If child is cooperative enough, if not we send them to RBH Lab for capillary</li> <li>Never would order capillary level, only venous</li> <li>100% of time, never do capillary</li> <li>When other labs being done require a venous stick</li> <li>If finger stick is high from health dept; child not on WIC</li> <li>If doing other blood tests</li> <li>All lead levels at our office would need to be venous for our reference lab method of testing</li> <li>All kids get venous unless can't get it - cap for children who come in for WIC</li> <li>Anytime there is a good vein</li> <li>All the time</li> <li>Venous test is always preferred</li> <li>We send all 12 mo, 2 yr old/5 yr to health dept for lead screen</li> </ul> |

Figure 76

Source: BHC, Inc., Provider Lead Screening Practice Survey, 2002

Barriers to Blood Lead Screening. Providers

were asked what factors they believed contributed to children not receiving blood lead testing at 12 and 24 months of age (see Figure 77). Most respondents indicated parental issues affecting whether or not a child received blood lead screening at 12 and 24 months of age. A total of 123 respondents provided 186 potential reasons for not obtaining blood lead levels. Of these reasons, 11 (8.9%) cited the cost of performing the test; 28

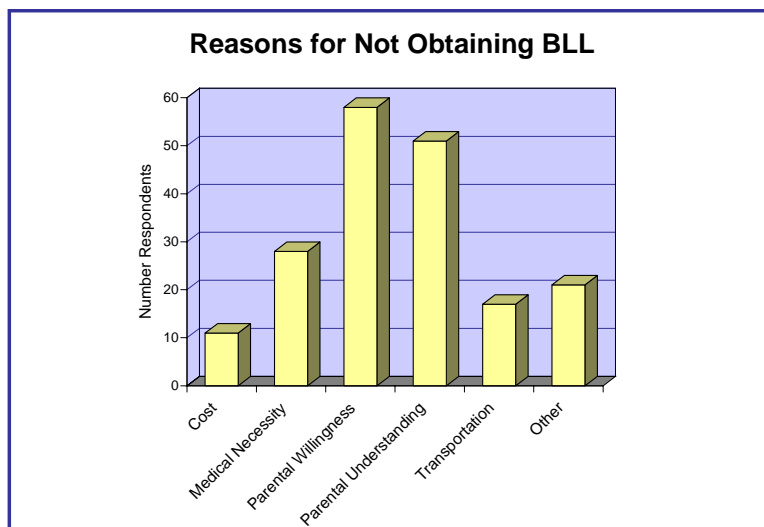


Figure 77

Source: BHC, Inc., Provider Lead Screening Practice Survey, 2002



(22.8%) to being medically unnecessary, and 109 (88.6%) cited parental unwillingness or misunderstanding of the screening need or consequences. The findings indicate a need for parental education and/or counseling regarding the importance of this testing. Seventeen (13.8%) respondents cited transportation as a problem. In addition, 21 respondents (17.1%) provided reasons other than those listed in the question.

Providers who indicated “Other” reasons for not performing blood lead screenings indicated both provider and beneficiary barriers. Figure 78 lists these responses as stated by the providers.

| Reasons for Not Obtaining Blood Lead Levels  |   |
|--|---|
| <ul style="list-style-type: none"> <li>Doctors don't follow through to make sure labs done</li> <li>Insurance does not cover lab test</li> <li>Not ordered by doctor</li> <li>Forget mostly</li> <li>Oversight</li> <li>Unable to obtain secondary method</li> <li>Doctor not order at well child checkups</li> <li>Multiple insurance companies require different labs</li> <li>Low priority to med provider</li> </ul> | <ul style="list-style-type: none"> <li>Inadequate staff time, cooperation</li> <li>Provider forgets to order it</li> <li>Transient population with bad addresses</li> <li>Patient may miss well child examination</li> <li>Many parents do not keep well child appointments</li> <li>Patient may miss well child examination</li> <li>Many parents do not keep well child appointments</li> <li>No patient follow up</li> <li>Many parents to not keep well child appointments</li> <li>Parents do not like needle stick</li> </ul> |

**Figure 78**

Source: BHC, Inc., Provider Lead Screening Practice Survey, 2002

Blood Lead Screening as Policy. Providers were asked to indicate how often and under what circumstances they believed blood lead level screening should be conducted as a matter of policy. Overall, providers were in agreement with screening for blood lead levels, with most respondents indicating agreement with current policies or recommending screening be targeted at those individuals or geographic areas at high risk. Individual responses are provided in Figure 79.

| Blood Lead Screening as a Matter of Policy<br>Individual Responses  |  |
|---|--|
| <ul style="list-style-type: none"> <li>Yearly</li> <li>1 year mandatory</li> <li>Age 1 yr - high risk patients based on lead risk assessment</li> <li>At 1 year of age on all children, again at 2 years of age for at risk children</li> <li>At 12 mo and 24 mo if high risk</li> <li>1 year and at 2 yr, try at 15 and 18 mo if missed at 1 year</li> <li>1 time a year unless a positive lead level is drawn or having been exposed</li> <li>At 1 year and repeat at 2 years unless they didn't</li> </ul> | <ul style="list-style-type: none"> <li>Questionnaire starting a 6 mo of age - then yearly questionnaire and mandatory testing 12-24 months. Any yes on questionnaire to be evaluated by physician and blood testing if needed</li> <li>All children 1 year old and 2 years old, However, I screen 5 year olds before kindergarten</li> <li>12 and 24 months as recommended</li> <li>Yearly until age 5</li> <li>1,2,5 years - questionnaire; 2,5 years blood lead level</li> <li>24 months, thereafter when child exhibit symptoms. Prenatal screening of mother would be a good indicator</li> <li>Every well child check or if symptoms indicate need for screening, increased risk factors, blood screen at 1 year and</li> </ul> |

|  |  |
|--|--|
| <p>receive a 1yr visit</p> <ul style="list-style-type: none"> <li>• 12 and 24 month is appropriate</li> <li>• According to guidelines begins at 9 mo to 1 yr age</li> <li>• 12 and 24 months (or anytime patient at risk and anytime if not done before age 6)</li> <li>• 1-2 times before 24 months</li> <li>• At 1 year and 2 years of age</li> <li>• Screening starting at 6 mo order lead level at 1 year old and 2 year old</li> <li>• Should be conducted with 1 and 2 year old well child checks</li> <li>• EPSDT 1 &amp; 2 years</li> <li>• Routinely at 1 &amp; 2 years</li> <li>• Routine 1 year, 2 year</li> <li>• 100% of the time</li> <li>• Every 1 year at 1,2, and 3 years</li> <li>• 12 &amp; 24 months</li> <li>• Age 1 &amp; 2 years at well child check</li> <li>• At risk or once at 1 yr w/continual screening</li> <li>• With every EPSDT diagnosis or any increase of lead exposure questions</li> <li>• We follow Medicaid guidelines. Start screening at 6 months and drawing lead levels at 1 yr and 2 years old</li> <li>• Yearly unless elevated, check every 3-6 months</li> <li>• It should be done routinely at 12 and 24 months and again before kindergarten</li> <li>• Always, twice before 2 years</li> <li>• 1 yr and at high risk</li> <li>• Once in early childhood (toddler age)</li> <li>• As required by state</li> <li>• If there are risk factors. In 'X' houses are new and risk is low</li> <li>• poverty, poor hygiene</li> <li>• Use lead risk assessment</li> <li>• Developmental delay, foster care</li> <li>• Positive questionnaire</li> <li>• UPS. Any child with growth, behavioral problems - any child housed in older housing</li> <li>• Screening every year</li> <li>• Only if high risks are identified in your practice (AAP current guidelines)</li> <li>• As present guidelines</li> <li>• Children living in older homes</li> <li>• Thorough history supports (increased risks) home conditions preclude need for lead screen</li> <li>• If questions are answered inappropriately</li> <li>• 'We do blood lead screening as a policy and have for several years</li> <li>• We sent to outside lab for draw and screenings</li> <li>• if parents take them</li> <li>• Most if not all are on WIC and are done at health dept</li> <li>• Children living in high risk areas and who have had</li> </ul> | <p>2 yr. Survey starting at ___ mo to 6 yr (yearly after 2 year)</p> <ul style="list-style-type: none"> <li>• Screening should be done on all children 12 months up to 6 years of age at least once/year. If at risk- at 6 months.</li> <li>• Screenings should be done on all children 12 months up to 6 years of age at least once/year. If at risk- at 6 months</li> <li>• Any circumstance general policy at 2 months 2 years and 4 years or if child is high risk</li> <li>• In high risk patients</li> <li>• Questionnaire - all children yearly until age 5, blood lead - high lead areas; Medicaid once at age 1; any who fail questionnaire or who want it done.</li> <li>• We are a public health agency. All children &lt;6 years who are at increased risk are screened. WIC refers children at 12 months and 24 months for a screen.</li> <li>• Other providers refer clients to our office</li> <li>• At each EPSDT</li> <li>• In locations where there is a sign of exposure this should be part of annual exam</li> <li>• 12 months of age - high risk ??? CDC, 3 question survey, 24 mo physician discretion/??FH/ER</li> <li>• At least one test by 2 years of age. If have normal level at 1 yer I'm not sure 2 yr test is necessary in low risk population</li> <li>• Not -only if ???</li> <li>• 3-5 years</li> <li>• We do lead screen on 6-72 months old</li> <li>• 12 and 24 months</li> <li>• 1 yr - 2 yr old</li> <li>• In high risk area, annually through age 6; county health dept</li> <li>• Per AAP guidelines, verbal or survey screening on all, with blood lead on at risk patients</li> <li>• Current schedule is sound</li> <li>• Medicaid requires screening at 12/24 months. These are performed</li> <li>• No Pos. Screen since I started practice 35 years ago</li> <li>• Current recommendation of verbal screening at each well visit with mandatory checks at 12 and 24 months is appropriate and should become policy. Appropriate reimbursement to physicians should also become policy.</li> <li>• We do screening on every child starting at 6 months.</li> <li>• We use the lead risk guide.</li> <li>• Currently all kids screened thru WIC and immunization clinics at county health department</li> <li>• The 'X' County Health Department follows the guidelines set forth by the MDHSS. We test all children that present in our child health conference clinics at age 1 and 2 - If a child presents at the clinic and has never had a CBL - we test that child up to the age of 6 years. At every clinic visit the screening test is used (usually at age 6 mo, 9 mo, 12 mo, 15 mo, 24 mo, 3 yr, 4 yr and 6 yr).</li> <li>• Ages 12/24 months or when risk factors exist. Private pay, negative risk factor patients decline 24 month assessment most of time.</li> <li>• Included in ? High level have ? Or have high risk factor - our risk factor ? Are law - like old paint and well water.</li> <li>• No opinion</li> <li>• Present guidelines are fine. No change needed</li> </ul> |
|--|--|

|   |  |
|---|--|
| <p>elevated blood lead levels should be rescreened per MO State recommendations</p> <ul style="list-style-type: none"> <li>• As indicated per MC+ guidelines and if household is at risk for exposure</li> <li>• Yearly after 1 yr of age follow up every 3 mo on child ?? Elevation under all circumstances. I believe that survey should be done. I believe clinical judgement is always best.</li> <li>• Only if clinical ??? = heavy mineral poisoning or positive questionnaire</li> <li>• Only in area with high lead exposure (older homes, ??? Lead processing, and ???)</li> </ul> | <ul style="list-style-type: none"> <li>• I agree with the current policy</li> <li>• It is a matter of policy most of our patients EPSDT requirements</li> <li>• As per current guidelines</li> <li>• All the time</li> </ul> |
|---|--|

**Figure 79**

Source: BHC, Inc., Provider Lead Screening Practice Survey, 2002

### Opportunities for Improvement

Documentation rates of lead screening in medical records was consistent with previous years' findings. A total of 24.3% of 12 month old children had documented a blood lead tests. Two cases had an elevated blood lead value (one 13 µg/dL and one 22 µg/dL), both of which were within normal ranges upon follow up testing. One child was 17 months of age, the other 14 months of age at the time the elevated level was detected. Given the low medical record retrieval rate, there is a possible under-reporting of rates. Encounter data, likewise, did not offer a full picture of blood lead screening and under-reported actual rates. Nonetheless, the screening rates remained at similar levels across the past four years. Utilization of the DMS Lead Assessment Guide was shown to be low, as was completion of the lead screen component on standardized EPSDT forms and represent continuing opportunities for provider education.

Recommendations based on this review include:

1. Reinforce to health plans and providers the requirement to conduct and document blood lead testing at 12 and 24 months of age.
2. Encourage health plans and providers to submit encounter data for lead toxicity diagnoses and blood lead screening.
3. Follow-up on screening rates, improvement strategies and monitoring systems with health plans at the annual administrative reviews.
4. Provide screening rates and survey information to the MC+ Medical Directors and QA&I Advisory Group for discussion and actions.
5. Encourage health plans and providers to continue parental education.
6. Consider a follow-up survey to assess specific needs for patient and provider education.
7. Consider opportunity for education regarding alternative methods to venapuncture (i.e. capillary devices, filter paper).
8. Plans should encourage providers to conduct venapuncture to avoid the member braking health care appointment, or missing the appointment due to transportation problems.



# Glossary

**ACOG:** American College of Obstetrics and Gynecologists

**AGPAR:** Named for Virginia Apgar. A method of assessing newborns on a scale of 1-10.

**BHO:** Behavioral Health Organization

**BRFSS:** Behavior Risk Factor Surveillance System

**CAHPS:** Consumer Assessment of Health Plans Survey

**CASA:** Clinical Assessment Software Application

**CHCS:** Center for Health Care Strategies

**CMHC:** Community Mental Health Centers

**COBRA:** Consolidated Omnibus Budget Reconciliation Act

**COPD:** Chronic Obstructive Pulmonary Disease

**COI:** Continuous Quality Improvement

**CSHCN:** Children with Special Health Care Needs

**C-STAR:** Comprehensive Substance Treatment and Rehabilitation

**DCN:** Department Control Number

**DFS:** Division of Family Services

**DHHS:** Department of Health and Human Services

**DMH:** Department of Mental Health

**DMS:** Division of Medical Services

**DNKA:** Did not keep appointment

**DSS:** Department of Social Services

**EDI:** Electronic Data Interchange

**EDS:** Electronic Data Systems

**EPSDT:** Early and Periodic Screening, Diagnosis and Testing

**EQRO:** External Quality Review Organization

**FFS:** Fee-for-service

**FHT:** Fetal Heart Tone

**FQHC:** Federally Qualified Health Center

**FPL:** Federal Poverty Level

**FTE:** Full-Time Equivalent

**HCFA:** Health Care Financing Administration

**HCY:** Healthy Children and Youth

**HEDIS:** Health Plan Employer Data and Information Set

**HIPAA:** Health Insurance Portability and Accountability Act

**HIPP Program:** Health Insurance Premium Payments

**HMO:** Health Maintenance Organization

**HRSA:** Health Research and Services Administration

**ICF-MR:** Intermediate Care Facility-Mental Retardation

**IDCN:** Individual Document Control Number

**IPA:** Individual Provider Association

**IVR:** Integrated Voice Response

**JCAHO:** Joint Commission on Accreditation of Healthcare Organizations

**LBW:** Low Birth Rate

**MAF:** Medical Assistance for Families

**MCH:** Maternal and Child Health

**MCO:** Managed Care Organization

**MDI:** Missouri Department of Insurance

**MFCU:** Medicaid Fraud Control Unit

**MHA:** Missouri Hospital Association

**MIS Director:** Management Information Systems Director

**MIU:** Medicaid Investigation Unit

**MOHSAIC:** Missouri Health Strategic Architectures and Information Cooperative

**MRDD:** Mentally Retarded/ Developmentally Disabled

**NCLS:** National Council of State Legislatures

**NCQA:** National Committee for Quality Assurance

**NHLBI:** National Heart, Lung and Blood Institute

**OIG:** Office of the Inspector General

**PBM:** Pharmacy Benefits Manager

**PCCM:** Primary Care Case Management

**PCP:** Primary Care Physician

**PHP:** Prepaid Health Plan

**PMPM:** Per-member per-month

**QA:** Quality Assurance

**QA&I Advisory Group:** Quality Assurance and Improvement Committee

**QI:** Quality Improvement

**QISMC:** Quality Improvement Systems for Managed Care

**RsMo:** Revised Statutes of Missouri

**RWJ:** Robert Wood Johnson Foundation

**SED:** Seriously Emotionally Disturbed

**SLAITS:** State and Local Area Integrated Telephone Survey

**SCHIP:** Child Health Insurance Program

**TANF:** Temporary Assistance to Needy Families

**TPA:** Third Party Administrator

**UM:** Utilization Management

**URAC:** Accrediting body for utilization management organizations.

**VBAC:** Vaginal Birth after Cesarean Section

**VLBW:** Very Low Birth Weight

**WIC:** Women, Infants and Children Program

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# Appendices

## Appendix A: Methods and Sources

### Primary Data

In order to conduct this External Quality Review, BHC generated primary data using a variety of techniques including administrative interviews, focus groups, medical record reviews, and telephone surveys.

### Administrative Site Reviews

BHC conducted one-day administrative site reviews at each of the MC+ health plans, except HealthNet, during February and March 2002. The review covered topics including the Provider Network, Provider Relations, Member Services, Complaints, Utilization Management, Information Systems, Mental Health, and the 1115 Waiver. In addition, information regarding personnel roles and subcontractors as well as improvements and barriers for each topic was requested. BHC structured the site visits to accommodate the schedules of the plan staff and to ensure maximum plan participation. Site visits were conducted by BHC consultants and existing documents were reviewed, including:

- CY2000 DMS self-assessment protocol and DMS recommendations;
- CY1998, CY1999, and CY2000 EQRO recommendations and follow-up evaluation;
- CY2000 DMS Quality Assessment and Improvement Reports; and
- CY2000 health plan QA & I Annual Reports.
- Western Region RFP requirements;
- Balanced Budget Act of 1997 (subparts C, D, and F);
- Western Region contract; and
- QAPI requirements.

### Consumer Advisory Committee Focus Group

On June 13, 2002, BHC staff conducted a consumer focus group at the DMS offices (Jefferson City, Missouri). The Consumer Advisory Committee includes consumer advocates of MC+ , DMS employees, and individual health plan representatives. The goal of the focus group was to obtain consumers' opinions on the MC+ program. Although this is a public meeting, BHC encouraged the DMS and health plan representatives not to attend, to foster more open communication among consumers. Each participant signed a confidentiality statement and informed consent (Appendix B) and was given a copy of the questions (Appendix B). There was a total of five (5) respondents participate in the focus group. In a structured, open-ended question format the study leader elicited responses from the group for the following topics. The questions discussed were:

1. Who has the greatest need for insurance, and to what extent do those who need insurance the most get it?
2. What barriers are there for families getting the insurance that they need?
3. If MC+ funds were extremely limited, what should be left out of the program, and/or who should be left out of the program, and why?
4. In your opinion, what are the best aspects of MC+ ?
5. What factors are the most important, in your opinion, and should be used to judge how well health plans are providing health care services, and how about for doctors, hospitals, and clinics?
6. How can the state and the health plans recruit consumers to be involved in decisions, and how can they utilize these consumers to improve the health outcomes of children and families?

All participants offered opinions which were recorded via tape, transcribed, and analyzed. A limitation of the focus group was the number of attendees. A total of eight (8) to twelve (12) would have been preferred. Regardless, the discussions with this group were insightful and various perspectives (e.g., beneficiaries, care given) were provided.

#### **Medical Record Review**

Enrollment and Encounter Data. Eligibility, enrollment, encounter, and provider files for use in sample selection and analyses were provided to BHC by the Missouri Department of Social Services, Division of Medical Services. Data provided via CD included information on 1.4 million enrollees and over 23 million claim records. These data were used to generate claims samples, case listings, member contact information for telephone surveys, and assessment for medical record review, of service utilization patterns.

Data from the four databases were used to create a data warehouse so that key fields could be linked and elements combined as needed (e.g., linking service encounters to the provider or health plan). The data required considerable cleaning and consistent format. After initial cleansing, data quality checks, using frequencies, distributions and missing data analyses were conducted. Decisions regarding “best” fields to use were made, recognizing limitations due to missing data, erroneous entries and time lags between claim submission and inclusion in the database. Once the data warehouse was created a sample was drawn for medical record review.

Enrollment files returned a higher number of health plan members than reported in other sources. Cases with invalid plan numbers, those in plans no longer providing MC+ services and duplicate entries were removed from the count. Cases in which a beneficiary was listed in more than one health plan at the same time were retained.

The inpatient claims analysis presented some difficulties in that Claim Type “I” produced encounters for specific inpatient services, instead of actual admissions. A total of 244,855 encounter claims were obtained with CY2001 service dates. An examination of associated revenue codes indicated the majority of these “encounter claims” were for room charges, pharmacy, laboratory and other services while the members were in the inpatient setting. To derive a more meaningful understanding of inpatient encounters, an attempt was made to convert available data into the number of admissions. Two approaches were used: (1) obtaining frequencies of unique patient account numbers, and (2) consolidating all claims associated with a specific IDCN with the same admission dates. These techniques both resulted in less than 30,000 events. Using these techniques appeared to result in an undercount of inpatient encounter claims compared to previous EQRO reports in which the number of encounters ranged from 23,878 in 1998 to 63,114 in CY2000. Information obtained from DMS indicated a total of 50,398 inpatient encounters during CY2001.

Sampling. Three criteria were used for sampling and requesting medical records, they were:

- Continuously enrolled in one plan for 12 or more months;
- Had at least one service encounter in the encounter file; and
- The ability to match the claim with a MC+ provider and address.

The study populations were identified from eligibility data files for all those who were enrolled in Medicaid (fee-for-service, 1115 Waiver, and 1915) during CY2001, AND continuously enrolled with a single health plan for at least twelve (12) months. To identify pregnant women, a selection using the ME codes 18, 43, 44, 45, 46, 47, or 61 was conducted. To identify children (those with birth dates before 1/1/94 and those after 12/31/2001 were excluded) the ME codes 02, 08, 09, 52, 57, 58, 64, 76, 77, 78, 79, 80, and 81 were used. These listings were then matched with the encounter data file using the IDCN and birth dates as keys. Those individuals who received services provided in office, outpatient, FQHC, state or local health clinic or RHC settings between January 1, 2001 and December 31, 2001 were selected for inclusion. The next step was to match this listing to the provider file in order to match individuals and services to specific health care providers. The provider name and address were collected in order to send requests for the medical records to the appropriate physicians. In addition to the primary care providers, specialists were also requested in anticipation of improving the preventive care documentation in the event the member received services from one or more provider.

Medical Record Receipt. Providers were asked to submit medical records to the BHC subcontractor for medical record review by June 14, 2002 (allowing them three weeks to copy and mail the records). Few providers had more than six medical records. Providers received an introductory letter, case listings identifying records to be submitted, an invoice

to obtain reimbursement for photocopying, and a self-addressed return label. Initially, medical record submission was slow with some providers declining to send records, citing privacy concerns. A number of providers requested formal documentation of BHC's contract status with the State, to ensure access to confidential information. Posting additional information on the web site (BHC's contract with the state and PRO-Like entity status letter), as well as efforts by health plan representatives, resulted in providers submitting medical records. Even with these efforts, only 50% of the requested records were received. This number is comparable to previous years' medical record requests despite extensive efforts to improve the rate. Some medical records were received as late as September 8, 2002, and unfortunately were not able to be included in the analyses.

Development and Use of Data Collection Tools. Data collection tools were developed for the EPSDT/HCY, Vaccination, Prenatal, and Lead Screening elements of the review. Tools were designed to follow standard outpatient formats such as the Missouri Department of Health immunization forms and the American College of Obstetrics and Gynecology (ACOG) prenatal forms. These tools were pilot-tested for ease in use and accuracy of data collection. Refinements to the tools were made following initial nurse abstractor training and prior to initiation of data abstraction (Appendix B).

Data Collection and Analyses. A BHC subcontractor, provided skilled nurse abstractors to conduct the data collection. A two-day training session including an overview of the MC+ program, the EQRO contract, outpatients' medical record structures and forms, and clinical terminology related to the EPSDT and vaccination documentation. Nurses were provided with practice records, and an opportunity to discuss practice findings and reach consensus on interpretations. Inter-rater reliability testing was conducted, resulting in a 91% agreement rate. Medical record reviews were conducted during July and August 2002.

Following data collection, each data collection form was electronically scanned into an Excel database via TeleFORM software. Each form was validated and approved for entry into the data base by a research assistant to ensure accuracy and completeness. Analyses were conducted using Microsoft Excel and SPSS v.11.0. Medical records were referenced, as needed, for clarification of elements during the analytic process.

#### **Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)**

BHC conducted a medical record review of children from birth to six (6) years of age to determine the degree to which EPSDT/HCY examinations were documented. Measures were obtained for 506 children who were six years of age and under, and who were continuously enrolled in the same MC+ health plan for at least twelve (12) months. EPSDT/HCY elements, including the types of components and dates of service were abstracted from the medical

records by registered nurses, using a standardized data collection instrument (Appendix B). Immunizations were assessed independently of the EPSDT/HCY examination measures. To ensure plans received credit for all exams, BHC allowed inclusion of elements contained in the medical record (e.g., progress notes, developmental charts, provider-specific forms) as well as those on the standardized state forms. For analyses, ages for children were determined using SQL scripts to calculate the children's age (in months), and to calculate actual ages at the time the services were documented. Age-appropriateness did not take into account those infants born prematurely, in which some components (e.g., lead screening, dental examination) may have been delayed by the provider.

### **Immunizations**

Immunizations were also part of the medical record review in order to determine the degree to which childhood immunizations were documented. Measures were obtained for the same 506 children in the EPSDT study. Criteria for inclusion were children six years of age and under, and continuously enrolled in the same MC+ health plan for at least twelve (12) months. Immunization data elements, including the vaccine type and date of administration, were abstracted from the medical records by registered nurses, using a standardized data collection instrument (Appendix B). Consistent with HEDIS indicator methodology, a note that the member was "up-to-date" with all immunizations without a listing of the dates of all immunizations and the names of the vaccines, was not considered adequate documentation. Thus, these cases were not included in the numerators for this study. For combination vaccinations (e.g., COMVAX), all components covered by the vaccine were credited.

### **Prenatal**

Medical records for 134 women with 140 pregnancies were received for review. For six (6) women who had more than one pregnancy during CY2001, each pregnancy was treated as a separate review. The following elements were abstracted from the medical records (Appendix B):

- Demographic information (age, race, marital status);
- Types of prenatal visit activities;
- Pregnancy risk assessments;
- Initial laboratory assessments;
- Nutrition assessments and interventions;
- Smoking status and interventions;
- Substance abuse status and interventions;
- Complications of this pregnancy;
- Delivery information (if the woman delivered during the study period and documentation was available);
- The number and dates of prenatal visits.

### **Provider Lead Survey**

To assess the opinions and practices of providers in regard to lead screening, a one-page survey with seven questions was mailed to those providers from whom pediatric medical records were being requested. Providers were asked to estimate the number of children in their practice referred for blood lead testing, their use of the Department of Health Lead Risk Assessment Guide, and their opinion regarding blood lead screening policies (Appendix B). A self-addressed, postage-paid envelope was included in the request packet to encourage higher response rates.

A total of 143 providers (22.0% of 650 mailed) returned completed lead survey forms in time for their responses to be considered. Although requested to be returned by June 14, 2001, responses were received as of September 8, 2001. Of those returned within the designated time frame, twenty indicated they were specialists or provider types that did not routinely provide well-child services. Of the remaining 123 respondents, information about practices and opinions regarding childhood lead screening was compiled and summarized.

### **Secondary Data**

To capitalize on existing data for the evaluation of the MC+ program, secondary data, in raw or aggregate format were used, as available. These sources included other health plans, State agencies, and National organizations.

#### **Complaints, CY2000 & CY2001. Missouri Department of Social Services, Division of Medical Services**

As part of the review of provider and member Health plan satisfaction, the annual summary of complaints was obtained from the State. Plans are required to submit quarterly reports of complaints, grievances, and appeals to DMS, along with an annual summary analysis of the quarterly reports. The reports consist of a number of categories for member complaints and provider complaints.

The number of complaints from the State was first compared to the quarterly reports to verify the accuracy of the data. The rate of member medical and non-medical complaints per 1,000 members was calculated using enrollment information for the number of members enrolled as of December 31, 2001. Limitations of this data may include differences in reporting between health plans, and the fact that the “other” category contains a large number of complaints, and details regarding the nature of these complaints is unknown.

#### **Consumer Assessment of Health Plans (CAHPS 2.0). Division of Medical Services, Department of Social Services**

CAHPS is a standard satisfaction survey used with health plans that has been implemented by the Division of Medical Services for individuals in fee-for-service, managed care, and the 1915(b) and 1115 Waiver groups. Raw data were obtained and analyzed, to compare changes



over time and within groups. Changes in the administration of the survey, implemented during the year 2000, made it difficult to assess whether any methodological differences account for findings. Several health plans in the Eastern Region administered the CAHPS through a vendor, while the state administered the surveys for the remaining plans, and the fee-for-service groups. It should be noted that without individual-level socioeconomic data, it was not possible to control for baseline differences in health status, access, or utilizations that are likely associated with socioeconomic factors.

The survey is administered to MC+ members throughout the state on an annual basis, and data are collected and compiled by the Division of Medical Services. A total of 16,208 surveys were mailed to MC+ members across all Health Plans in each region. Two thousand seven hundred fifty-seven (17%) of the surveys mailed were returned (ranging from a low of 8% for Care Partners (Central Region) to a high of 32% for Mercy Health Plan). Approximately 37% of the sample was enrolled in MC+ under the 1915(b) eligibility, with the remainder (63%) enrolled under the 1115 Waiver. The respondents were primarily 18 to 24 years of age (40%), followed by those who were 25 to 34 years of age (28.9%); 35 to 44 years of age (22.8%); and 45 to 54 years of age (7.3%). The remainders were more than 55 years of age (1%). Most respondents were female (77.7%), with most reporting a high school diploma or GED level of education (34.8%), followed by those who completed some high school but did not graduate (31.3%); those who had less than an eighth grade education (11.5%); had some college or a two-year degree (20.1%); or had a four-year college degree or more education (2.5%). Respondents were primarily Caucasian (61.4%), followed by Black or African-American (37.2%), Asian (.5%), with the remainder Native Hawaiian, Pacific Islander, American Indian, or Alaska Native. Most (98.4%) were English-speaking, and 77.6% completed the survey on their own without assistance from another person.

#### **DMS Medicaid Managed Care Organization (MCO) Self-Assessment**

As required by the Division of Social Services, Division of Medical Services' Quality Management Plan, the State conducts annual reviews of the individual health plans and their internal processes and outcomes. The self assessment was created by the Quality Services Section of DMS, to coincide with the contract and allow health plans to report on their processes.

The self assessment was changed for the 2001 year and now includes the sections of:

- Section 1: Provider Network;
- Section 2: Provider Relations;
- Section 3: Member Services;
- Section 4: Complaints, Grievances, and Appeals;
- Section 5: Quality Assessment and Improvement;

- Section 6: Utilization Management;
- Section 7: Records Management;
- Section 9: Information Systems; and
- Section 11: Mental Health.

Additionally, BHC reviewed the self-assessment responses and materials submitted by health plans to examine processes used by the health plans, and identify best practices and opportunities for health plan improvement.

#### **Enrollment Data, Missouri Department of Insurance**

This data was used to determine the market share of each health plan in each region. Limitations of this data include the fact that the enrollment totals include enrollees with a future start date and not a future stop date. Additionally, this enrollment summary is only for a specific date, as of December 31 of each year.

#### **MC+ Mental Health Utilization and Penetration Rates CY1999 and CY2000, Missouri Department of Mental Health, Mental Health Subgroup of the Quality Assurance and Improvement Advisory Group for the MC+ Health Plans**

Mental health services were examined as part of each health plan's review. This information for CY1999 and 2000 was collected from the health plans' behavioral health vendors. The penetration data are listed by total penetration rate (per 1,000 members), penetration by different age groups (0-12, 13-17, 18-64, and 64+), and the penetration rate for all children. The utilization data are also presented per 1,000 members (except for inpatient admissions which are presented per 1,000 discharges). In addition to inpatient admissions, inpatient days, residential days, inpatient substance abuse days, inpatient admissions for substance abuse days, partial hospital days, partial hospital admissions, outpatient visits, alternative services, 30-day ambulatory follow-up visits, and 7-day ambulatory follow-up visits are also provided. A major limitation of this data is that the information was available only for CY2000. The CY2001 figures will be reviewed when made available.

#### **MCH HEDIS Indicator Rates by Plan, Region, and State, 1997-2000, Missouri Department of Health and Senior Services, HAD, CHIME. June 26, 2001**

The Maternal Child Health (MCH) HEDIS Indicators used for the MC+ program include 11 different measures. Rates for spacing of births less than 18 months, births to mothers less than 18 years old, repeat births to mothers less than 20 years old, and prenatal WIC participation are available for the years 1997-2000. The remaining five measures (cesarean section, VBAC, adequacy of prenatal care, early prenatal care, low birth weight (less than 2500 G), and smoking during pregnancy) were provided for 1998 to 2000.

#### **2001 Provider Network Adequacy Report, Missouri Department of Insurance, Missouri Division of Medical Services**

This State report is designed to monitor network compliance, by plan and region, with

distance standards for providers, facilities and ancillary services. DMS conducts an analysis of distance standards for MC+ regions, based on provider network data filed by MC+ health plans, on an annual basis. General distance standards for surgical specialties and pediatric subspecialties are not included as no specific distance standards are set forth in 20 CSR 400-7.095. Additionally, regulations require that 95% of all enrollees residing or working in specified counties have access to provider, facility and ancillary services. If a health plan has an overall network score less than 95%, it is placed on probationary status. Exceptions may be requested and granted for specific counties. However, if the plan compliance was below 95% and no exceptions were given, the plan must cover benefits for enrollees in that county at no greater cost than if the services were obtained from a participating provider. A Plan of Action is required to be submitted to DMS for those areas that fall below the required 95% compliance level.

The results of the distance standards analysis, in conjunction with the number of providers by specialty, facilities, and ancillary services, was used to analyze the adequacy of each health plan's provider network. The rate of each type of specialty, facility, and ancillary providers per 1,000 members (enrollment as of December 31, 2001) was calculated to compare health plans based on their actual MC+ membership. One strength of the analysis conducted by the State is that distance standards and network adequacy are assessed by the ability of plans to meet the needs of the beneficiary population in the entire region. However, the rate of providers per 1,000 members does not take into account distance accessibility, but is based on actual enrollment. Neither method takes into account whether provider panels are open to new members.

#### **Provider Demographic Information, Medicaid MC+ Provider Demographics, Missouri Department of Insurance**

This report provides the actual number of specialists, ancillary services and facilities in each health plan, as of December 31, 2001. The enrollment data for each health plan was then used to obtain the rate of providers per 1,000 members. This information was used in conjunction with the Network Analysis to determine the adequacy of each health plan's network of providers. A limitation of this data is that it was reported for each health plan, and not segmented by region, thus not allowing separate analyses for those plans operating in more than one region.

**Selected HEDIS Measures, 1999-2000, Missouri Department of Health and Senior Services, CHIME; 2000 & 2001  
Show Me Consumers Guide; Missouri Managed Care Plans HEDIS Quality Indicator Rates**

These reports provided quality indicator rates for childhood immunization status (two year olds), well child visits in the first 14-15 months of life, well-child visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> years of life, check ups after delivery, annual dental visits, mental health utilization—members receiving (inpatient, day/night, ambulatory, and total services), and chemical dependency utilization—members receiving (inpatient, day/night, ambulatory, and total services). Rates for 1999 and 2000 were reported by MC+ health plan, along with the statewide MC+ average, and commercial managed care averages.

## Appendix B: Protocols

### Advisory Committee Focus Group Protocol

# Missouri External Quality Review

## MC+ Consumer Advisory Committee Focus Group

### **BASIC DEMOGRAPHIC INFORMATION:**

Name (please print):

Age:

Sex:

County of Residence:

Months of experiences with MC+:

Please check all that apply to you:

- ☐ Adult, insured with MC+ now or in the past
- ☐ Parent of a child insured with MC+ now or in the past
- ☐ Advocate of MC+ beneficiaries
- ☐ Other (please specify): \_\_\_\_\_

### **BASIC GUIDELINES:**

- 1) You must agree to respect each others' confidentiality.
- 2) Everyone must have an opportunity to speak.
- 3) We value everyone's opinion, there is no wrong answer!

### **INFORMED CONSENT:**

By signing this sheet and participating in the focus group, I give permission to be observed, and have my comments transcribed and audio recorded for analysis and use by BHC, Inc., its clients, affiliates and agents. I further acknowledge that I will be credited by name for my participation in this Focus Group unless I indicate that I do not wish this to happen. However, my name will not be attached to any of my responses.

I understand that my participation is completely voluntary, and that I may choose to withdraw at any time.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Check here if you DO NOT want to be named as a participant.

EPSDT Protocol**PATIENT INFORMATION**

First name

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\* USE LEADING -0-'S WHEN NECESSARY

- 1 White  
 2 African American  
 3 Hispanic / Latino  
 4 Asian  
 5 American Indian /  
    Alaskan Native  
 6 Native Hawaiian /  
    Other Pacific Islander  
 7 Other  
 8 Unknown  
 9 Not documented

Race (select 1-9)

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**REVIEWER INFORMATION**

Reviewer code

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Location

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Finish time \*

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\* IN MILITARY TIME

Sign Here

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| HCY Screening           |                           |                          |                           |                          |                           |                          |                           |                          |                           |                          |  |
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|                         |                           |                          | Last name                 |                          |                           | FI                       | IDCN                      |                          |                           |                          |  |
|                         |                           |                          | [ ][ ][ ][ ][ ]           |                          |                           | [ ]                      | [ ][ ][ ][ ][ ][ ][ ]     |                          |                           |                          |  |
|                         |                           |                          | 0-1 Month                 |                          |                           | 2-3 Months               |                           |                          | 4-5 Months                |                          |  |
| Screening Date          |                           |                          | [ ][ ] / [ ][ ] / [ ][ ]  |                          |                           | [ ][ ] / [ ][ ] / [ ][ ] |                           |                          | [ ][ ] / [ ][ ] / [ ][ ]  |                          |  |
| Interval History        | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Unclothed PE            | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Anticlp Guidance        | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Verbal Lead Screen      | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| State Lead Form Used    | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Development             | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Fine/Gross Motor Skills | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Hearing                 | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Vision                  | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Dental                  | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |

|                         |                           |                          | 6-8 Months                |                          |                           | 9-11 Months              |                           |                          | 12-14 Months              |                          |  |
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| Screening Date          |                           |                          | [ ][ ] / [ ][ ] / [ ][ ]  |                          |                           | [ ][ ] / [ ][ ] / [ ][ ] |                           |                          | [ ][ ] / [ ][ ] / [ ][ ]  |                          |  |
| Interval History        | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Unclothed PE            | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Anticlp Guidance        | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Verbal Lead Screen      | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| State Lead Form Used    | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Development             | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Fine/Gross Motor Skills | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Hearing                 | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Vision                  | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |
| Dental                  | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |  |

**HCY Screening**

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|                                | <b>Last name</b>  |   |   | <b>FI</b>            | <b>IDCN</b>   |
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|                                | <b>15-17 Months</b>   |   | <b>18-23 Months</b>   |                      | <b>24-35 Months</b>   |
| <b>Screening Date</b>          | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> |                      |   |
| <b>Interval History</b>        | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>Unclothed PE</b>            | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>Anticlp Guidance</b>        | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>Verbal Lead Screen</b>      | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>State Lead Form Used</b>    | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>Development</b>             | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>Fine/Gross Motor Skills</b> | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>Hearing</b>                 | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>Vision</b>                  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |
| <b>Dental</b>                  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |                      |   |

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|                                | <b>3 Years</b>  |   | <b>4 Years</b>  |  | <b>5 Years</b> |
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| <b>Interval History</b>        | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>Unclothed PE</b>            | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>Anticlp Guidance</b>        | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>Verbal Lead Screen</b>      | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>State Lead Form Used</b>    | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>Development</b>             | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>Fine/Gross Motor Skills</b> | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>Hearing</b>                 | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>Vision</b>                  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |
| <b>Dental</b>                  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  | <input type="radio"/> Yes <input type="radio"/> No  |  |                |



**HCY Screening**

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|                             | <b>6-7 Years</b>   | <b>Last name</b>     | <b>FI</b>            | <b>IDCN</b>          |
| <b>Screening Date</b>       | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| <b>Interval History</b>     | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>Unclothed PE</b>         | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>Anticlip Guidance</b>    | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>Verbal Lead Screen</b>   | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>State Lead Form Used</b> | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>Development</b>          | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>Fine/Gross Motor</b>     | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>Hearing</b>              | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>Vision</b>               | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |
| <b>Dental</b>               | <input type="radio"/> Yes <input type="radio"/> No                 |                      |                      |                      |

**BLOOD LEAD LEVELS**

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|------------------|--|----------------------|---|
|                  | <b>BLL DATE</b>  | <b>BLL Value</b>     | <b>INDICATE ALL REFERRALS MADE</b>  |
| <b>12 Months</b> | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> | <input type="radio"/> Health Plan <input type="radio"/> Health Dept <input type="radio"/> Clinical Specialist <input type="radio"/> Other |
| <b>24 Months</b> | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> | <input type="radio"/> Health Plan <input type="radio"/> Health Dept <input type="radio"/> Clinical Specialist <input type="radio"/> Other |
|                  | <b>OTHER BLL DATES</b>   | <b>BLL Value</b>     | <b>INDICATE ALL REFERRALS MADE</b>  |
|                  | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> | <input type="radio"/> Health Plan <input type="radio"/> Health Dept <input type="radio"/> Clinical Specialist <input type="radio"/> Other |
|                  | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> | <input type="radio"/> Health Plan <input type="radio"/> Health Dept <input type="radio"/> Clinical Specialist <input type="radio"/> Other |
|                  | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> | <input type="radio"/> Health Plan <input type="radio"/> Health Dept <input type="radio"/> Clinical Specialist <input type="radio"/> Other |
|                  | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> | <input type="radio"/> Health Plan <input type="radio"/> Health Dept <input type="radio"/> Clinical Specialist <input type="radio"/> Other |
|                  | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> | <input type="radio"/> Health Plan <input type="radio"/> Health Dept <input type="radio"/> Clinical Specialist <input type="radio"/> Other |

**ADDITIONAL COMMENTS**

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PLACE ADDITIONAL COMMENTS HERE (Please print):

**In your opinion, what was the quality of the medical record/documentation provided for abstraction ?**

Good Quality      Fair Quality      Poor Quality      Very Poor (not able to complete abstraction)

Immunization Protocol**PATIENT INFORMATION**

First name

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Last name

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Birthdate

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\* USE LEADING -0-'S WHEN NECESSARY

1 White

2 African American

3 Hispanic / Latino

4 Asian

5 American Indian /

Alaskan Native

6 Native Hawaiian /

Other Pacific Islander

7 Other

8 Unknown

9 Not documented

Race (select 1-9)

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**REVIEWER INFORMATION**

Reviewer code

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Location

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Review date

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\* IN MILITARY TIME

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**IMMUNIZATION DATA**

Last name FI IDCN:

| <u>VACCINE</u> | <u>IMMUNIZATION DATE</u>  | <u>REASONS FOR NOT IMMUNIZING</u>     |  |   |                             |
|----------------|---|---------------------------------------|--|---|-----------------------------|
| Hepatitis B-1  | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| Hepatitis B-2  | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| Hepatitis B-3  | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |

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|-------------------------------|------------------------------|-------------------------------|---|---------------------------------------|--|---|-----------------------------|
| DTaP<br><input type="radio"/> | DTP<br><input type="radio"/> | DT-1<br><input type="radio"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| DTaP<br><input type="radio"/> | DTP<br><input type="radio"/> | DT-2<br><input type="radio"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| DTaP<br><input type="radio"/> | DTP<br><input type="radio"/> | DT-3<br><input type="radio"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| DTaP<br><input type="radio"/> | DTP<br><input type="radio"/> | DT-4<br><input type="radio"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| DTaP<br><input type="radio"/> | DTP<br><input type="radio"/> | DT-5<br><input type="radio"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |

\* Indicate which immunization

|                                   |   |   |  |   |   |                             |
|-----------------------------------|---|---|--|---|---|-----------------------------|
| DTP/Hib-1                         | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated   | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other               |                             |
| DTP/Hib-2                         | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated   | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other               |                             |
| DTP/Hib-3                         | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated   | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other               |                             |
| DTaP/Hib<br><input type="radio"/> | DTP/Hib-4<br><input type="radio"/>  | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated  | <input type="radio"/> Parental Refusal    | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |

\* Indicate which immunization

|       |   |                                       |  |   |                             |
|-------|---|---------------------------------------|--|---|-----------------------------|
| Hib-1 | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| Hib-2 | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| Hib-3 | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
| Hib-4 | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |

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| VACCINE                       |                       | IMMUNIZATION DATE   | REASONS FOR NOT IMMUNIZING |  |  |  |  |  |                                       |  |   |                             |
|-------------------------------|-----------------------|---|----------------------------|--|--|--|--|--|---------------------------------------|--|---|-----------------------------|
| Hib/Hep-1                     |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Hib/Hep-2                     |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
|                               |                       |   |                            |  |  |  |  |  |                                       |  |   |                             |
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| Hib/Hep-3                     |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| OPV                           | IPV1                  | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
|                               |                       |   |                            |  |  |  |  |  |                                       |  |   |                             |
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| OPV                           | IPV2                  | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| <input type="radio"/>         | <input type="radio"/> |   |                            |  |  |  |  |  |                                       |  |   |                             |
| OPV                           | IPV3                  | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| OPV                           | IPV4                  | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| * Indicate which immunization |                       |   |                            |  |  |  |  |  |                                       |  |   |                             |
| MMR-1                         |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| MMR-2                         |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Varicella-1                   |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Varicella-2                   |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Td-1                          |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Td-2                          |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Td-3                          |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Td-4                          |                       | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                            |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| <u>VACCINE</u> | <u>IMMUNIZATION DATE</u>  | <u>REASONS FOR NOT IMMUNIZING</u> |  |  |  |  |  |                                       |  |   |                             |
|----------------|---|-----------------------------------|--|--|--|--|--|---------------------------------------|--|---|-----------------------------|
| Hepatitis A-1  | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Hepatitis A-2  | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Hepatitis A-3  | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Pneumococcal-1 | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Pneumococcal-2 | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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| Pneumococcal-3 | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
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|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
| Pneumococcal-4 | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
| Influenza-1    | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
| Influenza-2    | <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> / <table border="1"><tr><td></td><td></td></tr></table> |                                   |  |  |  |  |  | <input type="radio"/> Contraindicated | <input type="radio"/> Parental Refusal | <input type="radio"/> Not Age Appropriate | <input type="radio"/> Other |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |
|                |   |                                   |  |  |  |  |  |                                       |  |   |                             |

#### ADDITIONAL COMMENTS

PLACE COMMENTS HERE (Please print):

|  |
|--|
|  |
|--|

In your opinion, what was the quality of the medical record/documentation provided for abstraction ?

☐ Good Quality   
 ☐ Fair Quality   
 ☐ Poor Quality   
 ☐ Very Poor (not able to complete abstraction)

Prenatal Protocol**PATIENT INFORMATION**

First name

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
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Last name

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Birthdate

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(MM / DD / YYYY)

IDCN \*

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\* USE LEADING -0-'S WHEN NECESSARY

- 1 White
- 2 African American
- 3 Hispanic / Latino
- 4 Asian
- 5 American Indian /  
Alaskan Native
- 6 Native Hawaiian /  
Other Pacific Islander
- 7 Other
- 8 Unknown
- 9 Not documented

Race (select 1-9)

|  |
|--|
|  |
|--|

- 1 Single
- 2 Married
- 3 Widowed
- 4 Divorced
- 5 Separated
- 6 Unknown
- 7 Not Documented

Marital Status (select 1-7)

|  |
|--|
|  |
|--|

**REVIEWER INFORMATION**

Reviewer code

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

Location

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Review date

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Start time \*

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Finish time \*

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\* IN MILITARY TIME

Sign Here

|  |
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|--|

**REQUIRED PRENATAL CARE**

|                     |               |  |  |                 |          |           |                 |                            |                            |                            | Last name                  |  |  | FI | IDCN |  |  |  |  |  |
|---------------------|---------------|--|--|-----------------|----------|-----------|-----------------|----------------------------|----------------------------|----------------------------|----------------------------|--|--|----|------|--|--|--|--|--|
|                     |               |  |  |                 |          |           |                 |                            |                            |                            |                            |  |  |    |      |  |  |  |  |  |
|                     |               |  |  |                 |          |           |                 |                            |                            |                            | <b>BLOOD PRESSURE</b>      |  |  |    |      |  |  |  |  |  |
|                     | Date of Visit |  |  | Gestation Weeks | Systolic | Diastolic | Weight (in Lbs) | Interim History            | Fundal Height              | FHT                        | Urine Test                 |  |  |    |      |  |  |  |  |  |
| First Visit in 2001 |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |
| Visit 2             |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |
| Visit 3             |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |
| Visit 4             |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |
| Visit 5             |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |
| Visit 6             |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |
| Visit 7             |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |
| Visit 8             |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |
| Visit 9             |               |  |  |                 |          |           |                 | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |  |  |    |      |  |  |  |  |  |

**ADDITIONAL VISITS (If necessary)**

|          |  |  |  |  |  |  |  |                            |                            |                            |                            |
|----------|--|--|--|--|--|--|--|----------------------------|----------------------------|----------------------------|----------------------------|
| Visit 10 |  |  |  |  |  |  |  | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |
| Visit 11 |  |  |  |  |  |  |  | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |
| Visit 12 |  |  |  |  |  |  |  | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |
| Visit 13 |  |  |  |  |  |  |  | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |
| Visit 14 |  |  |  |  |  |  |  | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |
| Visit 15 |  |  |  |  |  |  |  | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |
| Visit 16 |  |  |  |  |  |  |  | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done | <input type="radio"/> Done |



**LABORATORY TESTING**

|                                   |  |   |   |                      |
|-----------------------------------|--|---|---|----------------------|
|                                   |  | Last name                                   | FI  | IDCN                 |
|                                   |  | <input type="text"/>                        | <input type="text"/>                        | <input type="text"/> |
|                                   |  | <b>RESULTS</b>                              |   |                      |
|                                   | DATE   | HgB   | Hct   |                      |
| Hemoglobin or Hematocrit          | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/> . <input type="text"/> | <input type="text"/> . <input type="text"/> |                      |
| AB blood typing and D (Rh) factor | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/>                        |   |                      |
| Antibody screen                   | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/>                        |   |                      |
| Rubella                           | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/>                        |   |                      |
| VDRL / RPR                        | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/>                        |   |                      |
| HIV                               | <input type="text"/> / <input type="text"/> / <input type="text"/> | <input type="text"/>                        |   |                      |

**COMPLICATIONS OF THIS PREGNANCY**

|                                   |  |                                   |  |
|-----------------------------------|--|-----------------------------------|--|
| Anemia                            | Yes <input type="radio"/> No <input type="radio"/> | Hyperemesis gravidarum            | Yes <input type="radio"/> No <input type="radio"/> |
| Gestational Diabetes              | Yes <input type="radio"/> No <input type="radio"/> | Pregnancy-induced Hypertension    | Yes <input type="radio"/> No <input type="radio"/> |
| Prolonged placental insufficiency | Yes <input type="radio"/> No <input type="radio"/> | Bleeding in 2nd half of pregnancy | Yes <input type="radio"/> No <input type="radio"/> |
| Trauma during pregnancy           | Yes <input type="radio"/> No <input type="radio"/> | Spontaneous abortion              | Yes <input type="radio"/> No <input type="radio"/> |
| Pre-term Labor                    | Yes <input type="radio"/> No <input type="radio"/> | Antepartum infection              | Yes <input type="radio"/> No <input type="radio"/> |

**PRENATAL RISK ASSESSMENT**Did patient have a risk assessment completed? Yes ☐ No ☐

If yes, what was the risk assessment score (if available)?

What elements are at risk?

Was care management initiated?

Yes ☐ No ☐

**SMOKING CESSATION**

|  |  |                      |                         |
|--|--|----------------------|-------------------------|
|  | Last name  | FI                   | IDCN                    |
|  | <input type="text"/>                               | <input type="text"/> | <input type="text"/>    |
| Did patient smoke before and/or during pregnancy?            | Yes <input type="radio"/> No <input type="radio"/> |                      |                         |
| If yes, Indicate pre-pregnancy amount:                       | # of packs per day                                 |                      | # of cigarettes per day |
|  | <input type="text"/>                               | OR                   | <input type="text"/>    |
| Indicate pregnancy amount:                                   | <input type="text"/>                               | OR                   | <input type="text"/>    |
| Was the patient counseled to stop smoking?                   | Yes <input type="radio"/> No <input type="radio"/> |                      |                         |
| Was the patient referred to a Smoking Cessation Program?     | Yes <input type="radio"/> No <input type="radio"/> |                      |                         |
| Were there any other interventions? (e.g. patch, medication) | Yes <input type="radio"/> No <input type="radio"/> |                      |                         |
| Did the patient decrease the amount smoked during pregnancy? | Yes <input type="radio"/> No <input type="radio"/> |                      |                         |
| Did the patient quit smoking during pregnancy?               | Yes <input type="radio"/> No <input type="radio"/> |                      |                         |

**SUBSTANCE ABUSE**

|  |  |
|--|--|
| Was substance abuse a documented problem?                      | Yes <input type="radio"/> No <input type="radio"/> |
| If yes, Indicate substance(s) being abused:                    | <input type="text"/>                               |
|  | <input type="text"/>                               |
| Was patient referred to Substance Abuse Program? (e.g. C-STAR) | Yes <input type="radio"/> No <input type="radio"/> |

**NUTRITION**

|   |  |
|---|--|
| Did patient have a nutrition problem documented?              | Yes <input type="radio"/> No <input type="radio"/> |
| If yes, Indicate problem(s):                                  | <input type="text"/>                               |
| Was patient referred to or enrolled in WIC?                   | Yes <input type="radio"/> No <input type="radio"/> |
| Was patient referred to or enrolled in a Nutritional Program? | Yes <input type="radio"/> No <input type="radio"/> |

**LABOR & DELIVERY (Complete if delivery occurs during study period)**

|                                |  |                      |                      |                      |                      |                                |                      |
|--------------------------------|--|----------------------|----------------------|----------------------|----------------------|--------------------------------|----------------------|
| Date of delivery:              | <input type="text"/>                               | /                    | <input type="text"/> | /                    | <input type="text"/> | Weeks gestation at birth:      | <input type="text"/> |
| Multiple births?               | Yes <input type="radio"/> No <input type="radio"/> |                      |                      |                      |                      |                                |                      |
| Type of delivery?              | <input type="text"/>                               |                      |                      |                      |                      |                                |                      |
| Weight of infant:              | Lbs  | <input type="text"/> | Ounces               | <input type="text"/> | OR:                  | Grams                          | <input type="text"/> |
| Apgar Score (Five (5) minute): | <input type="text"/>                               |                      |                      |                      |                      | Apgar Score (Ten (10) minute): | <input type="text"/> |

**ADDITIONAL COMMENTS**

Last name

FI

IDCN

|  |  |  |  |  |
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|  |  |  |  |  |
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3

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|--|--|--|--|--|--|--|--|

PLACE ADDITIONAL COMMENTS HERE (Please print):

**In your opinion, what was the quality of the medical record/documentation provided for abstraction ?**



**Good Quality**

**Fair Quality**



**Poor Quality**



**Very Poor (not able to complete abstraction)**

Physician Lead Screen Protocol**2002 MC+ Physician Lead Screen Survey****BHC, inc.**

We are BHC, of Columbia, MO, and we are conducting the External Quality Review for the Medicaid program (MC+) on behalf of the State of Missouri. As part of that contract, we are conducting a focused study on lead screening in the State of Missouri. In addition to the medical chart review, we are asking for your input on lead screening in order to get a clinical perspective. As with the chart review, all of the answers to this survey are confidential, and will be combined with all of the other physician responses to ensure confidentiality. Please take a minute to complete this one page survey. We would like to thank you in advance for your input and cooperation.

1) Approximately how many children in your practice are 24 months of age and under ?

# OF CHILDREN:

2) For what proportion of these children have you attempted to obtain BLOOD lead screening ?

VENOUS (%):

CAPILLARY (%):

3) What proportion of these children received BLOOD lead screening ?

%:

4) How often do you use the Missouri DSS Lead Risk Assessment Guide ?

- ☐ Always
- ☐ Most of the time
- ☐ Some of the time
- ☐ Never
- ☐ Not aware of the Guideline Sheet

5) Do you have a phlebotomist on site to draw blood lead levels ?

- ☐ Yes
- ☐ No

6) What blood lead level do you consider elevated and requiring follow-up ?

BLOOD LEAD LEVEL:

   mcg/dL

7) Under what circumstances do you conduct a venous Blood Lead Level ?


8) What do you believe are the major reasons for blood lead screening not being performed as recommended (at 12 and 24 months of age) ?

- ☐ Cost of performing
- ☐ Not medically necessary
- ☐ Parental unwillingness
- ☐ Parental misunderstanding of need or consequences
- ☐ Lack of transportation to off-site laboratory
- ☐ Other \_\_\_\_\_

9) How often, and under what circumstances, do you believe screening should be conducted as a matter of policy ?

Risk Appraisal for Pregnant Women

JAN-22-2003 13:17 FAMILY HEALTH MC+ AGENCY NAME 573 526 5347 P.01/01

 MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
**RISK APPRAISAL FOR PREGNANT WOMEN**  
 INSTRUCTIONS ON REVERSE SIDE

|   |   |  |  |
|---|---|--|--|
| DATE OF TEMP NO                         | BIRTHDATE   | DATE OF RISK APPRAISAL   | PROVIDER NAME (ATTACH MEDICAID PROVIDER LABEL)   |
| CLIENT'S NAME (LAST, FIRST, MI, MAIDEN) |   |  | ADDRESS (STREET)   |
| ADDRESS (STREET)                        |   |  | CITY STATE ZIP CODE  |
| CITY                                    | STATE   | ZIP CODE   | MEDICAID PROVIDER NUMBER   |
| TELEPHONE NUMBER                        | COUNTY OF RESIDENCE   | MARITAL STATUS CODE  | MONTH PRENATAL CARE BEGAN  |
| ( )                                     |   | <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> W <input type="checkbox"/> D <input type="checkbox"/> SEP | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4<br><input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7<br><input type="checkbox"/> 8 <input type="checkbox"/> 9 |
| RACE/ETHNICITY                          | <input type="checkbox"/> 1. WHITE <input type="checkbox"/> 2. BLACK<br><input type="checkbox"/> 4. ASIAN <input type="checkbox"/> 5. PACIFIC ISLANDER | <input type="checkbox"/> 3. AM.IND/ALASKAN<br><input type="checkbox"/> 6. OTHER  | HISPANIC ORIGIN <input type="checkbox"/> YES <input type="checkbox"/> NO LMP (MM/DD/YY) GRAVIDA PARA ABORTA  |

**PUT AN "X" IN ALL THE BOXES BELOW THAT APPLY. AN "X" IN ANY ONE OF THE FIRST 34 RISK FACTOR BOXES QUALIFIES CLIENT FOR CASE MANAGEMENT SERVICES.**

|   |  |
|---|--|
| <input type="checkbox"/> 1. Mother's age 17 years or less at time of conception   | <input type="checkbox"/> 16. Preterm labor: current pregnancy                              |
| <input type="checkbox"/> 2. Mother's education less than 8 years  | <input type="checkbox"/> 17. Seropositive for HIV antibodies                               |
| <input type="checkbox"/> 3. Gravida greater than or equal to 7  | <input type="checkbox"/> 18. Interconceptional spacing <1 year                             |
| <input type="checkbox"/> 4. Currently smoking   | <input type="checkbox"/> 19. Living alone or single parent living alone                    |
| <input type="checkbox"/> 5. Mother's age 35 years or greater at time of conception  | <input type="checkbox"/> 20. Considered relinquishment of infant                           |
| <input type="checkbox"/> 6. Prepregnancy weight less than 100 lbs   | <input type="checkbox"/> 21. Unfavorable environmental conditions                          |
| <input type="checkbox"/> 7. Previous fetal death (20 weeks gestation or later)  | <input type="checkbox"/> 22. Late entry into care (after 4th month or 18 weeks gestation)  |
| <input checked="" type="checkbox"/> 8. Previous infant death  | <input type="checkbox"/> 23. Homelessness  |
| <input type="checkbox"/> 9. History of incompetent cervix in current or past pregnancy  | <input type="checkbox"/> 24. Alcohol abuse by client                                       |
| <input type="checkbox"/> 10. History of diabetes mellitus including gestational diabetes in current or past pregnancy   | <input type="checkbox"/> 25. Alcohol abuse by partner                                      |
| <input type="checkbox"/> 11. Multiple fetuses in current pregnancy  | <input type="checkbox"/> 26. Drug dependence or misuse by client                           |
| <input type="checkbox"/> 12. Pre-existing hypertension (a history of hypertension — 140/90 mm Hg or greater — antedating pregnancy or discovery of hypertension — 140/90 or greater — before the 20th week of pregnancy)  | <input type="checkbox"/> 27. Drug dependence or misuse by partner                          |
| <input type="checkbox"/> 13. Pregnancy-induced hypertension in current pregnancy (blood pressure is 140/90 or greater, or there has been an increase of 30 mm Hg systolic or 15 mm Hg diastolic over baseline values on at least two occasions six or more hours apart) | <input type="checkbox"/> 28. Physical or emotional abuse/neglect of client                 |
| <input type="checkbox"/> 14. Prior low birth weight baby (<2500 grams or 5 lbs. 8 oz.)  | <input type="checkbox"/> 29. Physical abuse of children in the home                        |
| <input type="checkbox"/> 15. Prior preterm labor (<37 completed weeks gestation)  | <input type="checkbox"/> 30. Neglect of children in the home                               |
|   | <input type="checkbox"/> 31. Partner with history of violence                              |
|   | <input type="checkbox"/> 32. Chronic or recent mental illness and/or psychiatric treatment |
|   | <input type="checkbox"/> 33. Elevated blood lead level 15-19ug/dl or greater               |
|   | <input type="checkbox"/> 34. Other, identify: _____  |
|   | <input type="checkbox"/> 99. None of the above   |

**FOLLOWING DOES NOT QUALIFY FOR CASE MANAGEMENT SERVICES. DATA COLLECTION IS NECESSARY FOR PROGRAM PLANNING. (CHECK ONE)**

|  |  |
|--|--|
| <input type="checkbox"/> 1. Intended pregnancy                       | <input type="checkbox"/> 3. Unintended pregnancy not using birth control |
| <input type="checkbox"/> 2. Unintended pregnancy using birth control | <input type="checkbox"/> 4. Unintended pregnancy - birth control unknown |

|  |                               |  |
|--|-------------------------------|--|
| SPECIFY GESTATIONAL AGE AT TIME OF RISK APPRAISAL: _____ WEEKS | APPROXIMATE DUE DATE MM DD YY | PHYSICIAN'S PERFORMING PROVIDER NUMBER |
| PROVIDER SIGNATURE   | DATE                          |  |
| PREFERRED CASE MANAGEMENT PROVIDER AGENCY                      |                               |  |

MO 580-1171 (1-02) DISTRIBUTION: WHITE/CANARY - DIVISION OF MCH/CASE MANAGEMENT AT TIME OF ENTRY CM-4



## Risk Appraisal Form for Pregnant Women

### Purpose:

To document the appraisal "at risk conditions for determining client's eligibility for Medicaid Case Management Services.

### Distribution:

White & Canary — Missouri Department of Health  
copies BSHCN/Case Management

Green copy — Client

*(Fold forms on lines with postage paid business reply  
on outside. Seal with staple or tape.)*

Pink copy — Client's Record

### Instructions:

#### (Shaded area)

**Medicaid Provider Box** — Attach Medicaid Provider Label to each copy or:

**Provider Name** — Print or type provider name of the Agency completing the Risk Appraisal

**Address** — Provider Agency address, (Street or Box number, City, State and Zip code)

**Medicaid Provider Number** — 9 digit Missouri Medicaid Number assigned by the Medicaid State Agency for billing identification purposes.

**DCN** — Enter the 8 digit number assigned to eligible Medicaid recipients.

**Birth Date** — Enter the client's birth date as it is shown on the Medicaid card. (Use MM/DD/YY format.)

**Date** — Enter date the Risk Appraisal was conducted. (Use MM/DD/YY format.)

**Client's Name** — Enter last name, first name, middle initial, and maiden name of client.

**Address** — Enter street number and name or rural route and box number.

**City, State, Zip Code** — Enter as usual.

**Telephone** — Enter telephone number of client (include area code).

**County** — Enter county of residence.

**Marital Status Code** — Check the appropriate box.

**Race Code** — Check the appropriate race box even if client is Hispanic (Hispanic is not a race).

**Hispanic Origin** — Check the appropriate box.

**LMP** — Enter date of last normal menstrual period. (Use MM/DD/YY format.)

**Gravida** — Enter the number of times client has been pregnant including this pregnancy.

**Para** — Enter the number of previous deliveries 20 weeks gestation or beyond (includes stillborns).

**Aborta** — Enter the number of spontaneous and/or induced abortions experienced by client.

**Risk Factors** — Enter an "X" in all of the boxes that apply to client. An "X" in any one of the first 34 boxes qualifies client for case management services.

**Intended/Unintended Pregnancy** — Check the appropriate box.

**Specify Gestational Age** — Enter the number of weeks pregnant at the time of the Risk Appraisal.

**Approximate Due Date** — Enter the approximate due date. (Use MM/DD/YY format.)

**Physician's Performing Provider Number** — Enter the Medicaid performing provider number of the physician or nurse practitioner affiliated with the clinic/agency.

**Provider signatures** — Sign and date. May be signed by an RN or physician.

**Preferred Case Management Provider** — Enter the name of the case management provider agency chosen by client.

## Appendix C: Data Tables

MC+ Health Plan Enrollment Data, 2000 - 2001

|         | Health Plan              | Enrollment     |                |              | Region Market Share |               |              |
|---------|--------------------------|----------------|----------------|--------------|---------------------|---------------|--------------|
|         |                          | 2000           | 2001           | (00-01)      | 2000                | 2001          | (00-01)      |
| Central | HealthCare USA (Central) | 24,985         | 29,637         | 18.6%        | 50.2%               | 51.6%         | 2.7%         |
|         | Care Partners (Central)  | 3,801          | -              | -            | 7.6                 | -             | -            |
|         | Missouri Care            | 20,962         | 27,821         | 32.7         | 42.1                | 48.4          | 14.9         |
| Eastern | Mercy Health Plan        | 18,315         | 23,105         | 26.2         | 9.9                 | 10.4          | 5.4          |
|         | Care Partners (Eastern)  | 44,178         | 52,640         | 19.2         | 23.8                | 23.7          | (0.5)        |
|         | Community Care Plus      | 25,881         | 34,129         | 31.9         | 13.9                | 15.4          | 10.2         |
| Western | HealthCare USA (Eastern) | 97,212         | 112,268        | 15.5         | 52.4                | 50.5          | (3.5)        |
|         | Family Health Partners   | 40,310         | 44,931         | 11.5         | 38.6                | 38.6          | 0.1          |
|         | HealthNet                | 13,550         | 13,570         | 0.1          | 13.0                | 11.7          | (10.0)       |
|         | Blue Advantage Plus      | 24,525         | 27,108         | 10.5         | 23.5                | 23.3          | (0.7)        |
|         | FirstGuard Health Plan   | 26,080         | 30,659         | 17.6         | 25.0                | 26.4          | 5.6          |
|         | <i>Central</i>           | 49,748         | 57,458         | 15.5         | 14.6                | 14.5          | (0.9)        |
|         | <i>Eastern</i>           | 185,586        | 222,142        | 19.7         | 54.6                | 56.1          | 2.7          |
|         | <i>Western</i>           | 104,465        | 116,268        | 11.3         | 30.7                | 29.4          | (4.5)        |
|         | <b>Missouri</b>          | <b>339,799</b> | <b>395,868</b> | <b>16.5%</b> | <b>100.0%</b>       | <b>100.0%</b> | <b>16.5%</b> |

Table C1

Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen

Note: Enrollment data is as of December 31 of the respective year. Enrollment totals include enrollees with a future start date. Enrollment totals do not include enrollees with a future stop date.

2000 was Care Partners last complete year of operation in the Central Region.

MC+ Network Adequacy, All Services, 2001

|         | Health Plan            | Rate of Compliance |              |              |                    |
|---------|------------------------|--------------------|--------------|--------------|--------------------|
|         |                        | PCP                | Specialists  | Facilities   | Ancillary Services |
| Central | HealthCare USA         | 100.0%             | 97.0%        | 99.0%        | 100.0%             |
|         | Missouri Care          | 100.0              | 97.0         | 100.0        | 98.0               |
|         | Mercy Health Plan      | 100.0              | 100.0        | 92.0         | 98.0               |
| Eastern | Care Partners          | 100.0              | 98.0         | 93.0         | 92.0               |
|         | Community Care Plus    | 100.0              | 95.0         | 98.0         | 92.0               |
|         | HealthCare USA         | 100.0              | 100.0        | 99.0         | 100.0              |
| Western | Family Health Partners | 100.0              | 99.0         | 99.0         | 94.0               |
|         | HealthNet              | 100.0              | 98.0         | 97.0         | 92.0               |
|         | Blue Advantage Plus    | 100.0              | 97.0         | 100.0        | 87.0               |
|         | FirstGuard Health Plan | 100.0              | 97.0         | 99.0         | 94.0               |
|         | <i>Central</i>         | 100.0              | 97.0         | 99.5         | 99.0               |
|         | <i>Eastern</i>         | 100.0              | 98.3         | 95.5         | 95.5               |
|         | <i>Western</i>         | 100.0              | 97.8         | 98.8         | 91.7               |
|         | <b>Missouri</b>        | <b>100.0%</b>      | <b>97.8%</b> | <b>97.6%</b> | <b>94.7%</b>       |

Table C2

Source: Missouri Department of Insurance, 2001

Note: PCP = Primary care physicians.



| Network Adequacy for Provider Specialties, 2001 |                        |                    |         |                |             |                    |               |                  |                    |            |           |                        |               |           |            |                                   |
|---|------------------------|--------------------|---------|----------------|-------------|--------------------|---------------|------------------|--------------------|------------|-----------|------------------------|---------------|-----------|------------|-----------------------------------|
|   | Health Plan            | Rate of Compliance |         |                |             |                    |               |                  |                    |            |           |                        |               |           |            |                                   |
|   |                        | PCP/OBGYN          | Allergy | Anesthesiology | Dermatology | Emergency Medicine | Endocrinology | Gastroenterology | Infectious Disease | Nephrology | Neurology | Obstetrics/ Gynecology | Ophthalmology | Pathology | Pediatrics | Physical Medicine/ Rehabilitation |
| Central   | HealthCare USA         | 100.0%             | 97.0%   | 100.0%         | 97.0%       | 100.0%             | 97.0%         | 100.0%           | 97.0%              | 100.0%     | 100.0%    | 100.0%                 | 100.0%        | 29.0%     | 100.0%     | 100.0%                            |
|   | Missouri Care          | 100.0              | 100.0   | 100.0          | 100.0       | 0.0                | 100.0         | 100.0            | 100.0              | 100.0      | 100.0     | 98.0                   | 100.0         | 100.0     | 100.0      | 100.0                             |
|   | Mercy Health Plan      | 100.0              | 100.0   | 100.0          | 100.0       | 100.0              | 100.0         | 100.0            | 97.0               | 97.0       | 98.0      | 100.0                  | 100.0         | 100.0     | 97.0       | 97.0                              |
| Eastern   | Care Partners          | 100.0              | 97.0    | 100.0          | 100.0       | 100.0              | 90.0          | 100.0            | 97.0               | 97.0       | 99.0      | 95.0                   | 100.0         | 100.0     | 100.0      | 91.0                              |
|   | Community Care Plus    | 100.0              | 98.0    | 89.0           | 98.0        | 100.0              | 97.0          | 99.0             | 0.0                | 97.0       | 94.0      | 99.0                   | 100.0         | 100.0     | 97.0       | 93.0                              |
|   | HealthCare USA         | 100.0              | 100.0   | 97.0           | 100.0       | 100.0              | 100.0         | 100.0            | 97.0               | 100.0      | 100.0     | 100.0                  | 100.0         | 100.0     | 100.0      | 97.0                              |
| Western   | Family Health Partners | 100.0              | 99.0    | 100.0          | 99.0        | 100.0              | 100.0         | 98.0             | 99.0               | 99.0       | 91.0      | 98.0                   | 100.0         | 93.0      | 98.0       | 99.0                              |
|   | HealthNet              | 100.0              | 98.0    | 100.0          | 97.0        | 100.0              | 100.0         | 98.0             | 97.0               | 100.0      | 97.0      | 98.0                   | 100.0         | 97.0      | 94.0       | 96.0                              |
|   | Blue Advantage Plus    | 100.0              | 99.0    | 99.0           | 99.0        | 100.0              | 93.0          | 98.0             | 99.0               | 99.0       | 99.0      | 99.0                   | 98.0          | 100.0     | 93.0       | 99.0                              |
|   | FirstGuard Health Plan | 100.0              | 93.0    | 100.0          | 91.0        | 100.0              | 100.0         | 98.0             | 91.0               | 94.0       | 97.0      | 98.0                   | 100.0         | 93.0      | 100.0      | 100.0                             |
|   | Central                | 100.0              | 98.5    | 100.0          | 98.5        | 50.0               | 98.5          | 100.0            | 98.5               | 100.0      | 100.0     | 99.0                   | 100.0         | 64.5      | 100.0      | 100.0                             |
|   | Eastern                | 100.0              | 98.8    | 96.5           | 99.5        | 100.0              | 96.8          | 99.8             | 72.8               | 97.8       | 97.8      | 98.5                   | 100.0         | 100.0     | 98.5       | 94.5                              |
|   | Western                | 100.0              | 97.3    | 99.8           | 96.5        | 100.0              | 98.3          | 98.0             | 96.5               | 98.0       | 96.0      | 98.3                   | 99.5          | 95.8      | 96.3       | 98.5                              |
|   | Missouri               | 100.0%             | 98.1%   | 98.5%          | 98.1%       | 90.0%              | 97.7%         | 99.1%            | 87.4%              | 98.3%      | 97.5%     | 98.5%                  | 99.8%         | 91.2%     | 97.9%      | 97.2%                             |

| Network Adequacy for Provider Specialties, 2001 - Continued |                        |                              |                                 |                      |           |              |                 |                |            |                         |         |          |             |             |                   |            |
|---|------------------------|------------------------------|---------------------------------|----------------------|-----------|--------------|-----------------|----------------|------------|-------------------------|---------|----------|-------------|-------------|-------------------|------------|
| Central<br>Eastern<br>Western                               | Health Plan            | Psychiatry<br>Adult/ General | Psychiatry Child/<br>Adolescent | Pulmonary<br>Disease | Radiology | Rheumatology | General Surgery | Otolaryngology | Cardiology | Hematology/<br>Oncology | Urology | Podiatry | Vision Care | Orthopedics | General Dentistry | Psychology |
|   | HealthCare USA         | 100.0%                       | 100.0%                          | 100.0%               | 100.0%    | 100.0%       | 100.0%          | 100.0%         | 100.0%     | 100.0%                  | 100.0%  | 100.0%   | 100.0%      | 100.0%      | 100.0%            | 100.0%     |
|   | Missouri Care          | 99.0                         | 99.0                            | 100.0                | 99.0      | 100.0        | 100.0           | 100.0          | 100.0      | 100.0                   | 100.0   | 100.0    | 100.0       | 100.0       | 100.0             | 100.0      |
|   | Mercy Health Plan      | 100.0                        | 77.0                            | 100.0                | 100.0     | 100.0        | 100.0           | 100.0          | 100.0      | 100.0                   | 100.0   | 100.0    | 100.0       | 100.0       | 98.0              | 100.0      |
|   | Care Partners          | 100.0                        | 100.0                           | 100.0                | 90.0      | 96.0         | 100.0           | 100.0          | 100.0      | 97.0                    | 100.0   | 97.0     | 100.0       | 100.0       | 93.0              | 100.0      |
|   | Community Care Plus    | 99.0                         | 99.0                            | 98.0                 | 91.0      | 95.0         | 96.0            | 99.0           | 100.0      | 100.0                   | 100.0   | 100.0    | 100.0       | 100.0       | 98.0              | 98.0       |
|   | HealthCare USA         | 100.0                        | 100.0                           | 97.0                 | 100.0     | 97.0         | 100.0           | 100.0          | 100.0      | 100.0                   | 100.0   | 100.0    | 100.0       | 100.0       | 99.0              | 100.0      |
|   | Family Health Partners | 100.0                        | 100.0                           | 100.0                | 100.0     | 91.0         | 100.0           | 100.0          | 100.0      | 100.0                   | 100.0   | 100.0    | 100.0       | 100.0       | 100.0             | 100.0      |
|   | HealthNet              | 100.0                        | 90.0                            | 98.0                 | 100.0     | 94.0         | 100.0           | 100.0          | 100.0      | 97.0                    | 98.0    | 100.0    | 100.0       | 100.0       | 100.0             | 100.0      |
|   | Blue Advantage Plus    | 87.0                         | 77.0                            | 100.0                | 91.0      | 99.0         | 100.0           | 100.0          | 100.0      | 100.0                   | 99.0    | 100.0    | 100.0       | 100.0       | 100.0             | 93.0       |
|   | FirstGuard Health Plan | 100.0                        | 100.0                           | 93.0                 | 100.0     | 91.0         | 100.0           | 100.0          | 100.0      | 100.0                   | 93.0    | 100.0    | 100.0       | 94.0        | 100.0             | 100.0      |
|   | Central                | 99.5                         | 99.5                            | 100.0                | 99.5      | 100.0        | 100.0           | 100.0          | 100.0      | 100.0                   | 100.0   | 100.0    | 100.0       | 100.0       | 100.0             | 100.0      |
|   | Eastern                | 99.8                         | 94.0                            | 98.8                 | 95.3      | 97.0         | 99.0            | 99.8           | 100.0      | 99.3                    | 100.0   | 99.3     | 100.0       | 100.0       | 97.0              | 99.5       |
|   | Western                | 96.8                         | 91.8                            | 97.8                 | 97.8      | 93.8         | 100.0           | 100.0          | 100.0      | 99.3                    | 97.5    | 100.0    | 100.0       | 98.5        | 100.0             | 98.3       |
|   | Missouri               | 98.5%                        | 94.2%                           | 98.6%                | 97.1%     | 96.3%        | 99.6%           | 99.9%          | 100.0%     | 99.4%                   | 99.0%   | 99.7%    | 100.0%      | 99.4%       | 98.8%             | 99.1%      |

Table C3

Source: Missouri Department of Insurance, 2001

MC+ Network Adequacy, Facilities, 2001

| Health Plan            | Rate of Compliance |                    |                   |  |   |                                     |   |   |                              |                      |          |
|------------------------|--------------------|--------------------|-------------------|--|---|-------------------------------------|---|---|------------------------------|----------------------|----------|
|                        | Basic Hospital     | Secondary Hospital | Tertiary Hospital | Inpatient Intensive Treatment-Alcohol /Chem Dependency | Inpatient Intensive Treatment-Child/ Adolescent | Inpatient Adult Intensive Treatment | Inpatient Geriatric Intensive Treatment | Outpatient Child / Adolescent Psychiatric | Outpatient Adult Psychiatric | Outpatient Geriatric | Pharmacy |
| Central                |                    |                    |                   |  |   |                                     |   |   |                              |                      |          |
| HealthCare USA         | 100.0%             | 100.0%             | 95.0%             | 100.0%   | 100.0%  | 99.0%                               | 100.0%                                  | 97.0%                                     | 90.0%                        | 100.0%               | 100.0%   |
| Missouri Care          | 98.0               | 100.0              | 100.0             | 100.0  | 100.0   | 99.0                                | 100.0                                   | 100.0                                     | 100.0                        | 100.0                | 100.0    |
| Eastern                |                    |                    |                   |  |   |                                     |   |   |                              |                      |          |
| Mercy Health Plan      | 95.0               | 100.0              | 100.0             | 100.0  | 92.0  | 87.0                                | 100.0                                   | 86.0                                      | 70.0                         | 88.0                 | 95.0     |
| Care Partners          | 100.0              | 100.0              | 100.0             | 100.0  | 97.0  | 86.0                                | 100.0                                   | 86.0                                      | 62.0                         | 86.0                 | 100.0    |
| Community Care Plus    | 98.0               | 100.0              | 95.0              | 100.0  | 100.0   | 92.0                                | 100.0                                   | 97.0                                      | 95.0                         | 96.0                 | 100.0    |
| Western                |                    |                    |                   |  |   |                                     |   |   |                              |                      |          |
| HealthCare USA         | 100.0              | 100.0              | 100.0             | 100.0  | 100.0   | 96.0                                | 100.0                                   | 97.0                                      | 91.0                         | 99.0                 | 100.0    |
| Family Health Partners | 100.0              | 100.0              | 91.0              | 100.0  | 100.0   | 100.0                               | 100.0                                   | 100.0                                     | 100.0                        | 100.0                | 100.0    |
| HealthNet              | 98.0               | 100.0              | 91.0              | 96.0   | 98.0  | 100.0                               | 100.0                                   | 100.0                                     | 88.0                         | 99.0                 | 100.0    |
| Blue Advantage Plus    | 100.0              | 100.0              | 99.0              | 100.0  | 100.0   | 99.0                                | 100.0                                   | 100.0                                     | 99.0                         | 100.0                | 100.0    |
| FirstGuard Health Plan | 100.0              | 100.0              | 91.0              | 100.0  | 100.0   | 100.0                               | 100.0                                   | 100.0                                     | 99.0                         | 100.0                | 100.0    |
| Central                | 99.0               | 100.0              | 97.5              | 100.0  | 100.0   | 99.0                                | 100.0                                   | 98.5                                      | 95.0                         | 100.0                | 100.0    |
| Eastern                | 98.3               | 100.0              | 98.8              | 100.0  | 97.3  | 90.3                                | 100.0                                   | 91.5                                      | 79.5                         | 92.3                 | 98.8     |
| Western                | 99.5               | 100.0              | 93.0              | 99.0   | 99.5  | 99.8                                | 100.0                                   | 100.0                                     | 96.5                         | 99.8                 | 100.0    |
| Missouri               | 98.9%              | 100.0%             | 96.2%             | 99.6%  | 98.7%   | 95.8%                               | 100.0%                                  | 96.3%                                     | 89.4%                        | 96.8%                | 99.5%    |

Table C4

Source: Missouri Department of Insurance, 2001

MC+ Network Analysis, Ancillary Services, 2001

|         |                        | Rate of Compliance |             |         |        |        |        |
|---------|------------------------|--------------------|-------------|---------|--------|--------|--------|
|         |                        | Audiology          | Home Health | Hospice | OT     | PT     | SLP    |
| Central | Health Plan            |                    |             |         |        |        |        |
|         | HealthCare USA         | 100.0%             | 100.0%      | 100.0%  | 100.0% | 100.0% | 100.0% |
| Eastern | Missouri Care          | 94.0               | 100.0       | 100.0   | 98.0   | 98.0   | 100.0  |
|         | Mercy Health Plan      | 100.0              | 100.0       | 99.0    | 93.0   | 95.0   | 100.0  |
|         | Care Partners          | 81.0               | 100.0       | 70.0    | 100.0  | 100.0  | 100.0  |
|         | Community Care Plus    | 92.0               | 100.0       | 65.0    | 100.0  | 100.0  | 100.0  |
| Western | HealthCare USA         | 100.0              | 100.0       | 100.0   | 100.0  | 100.0  | 100.0  |
|         | Family Health Partners | 100.0              | 100.0       | 67.0    | 100.0  | 100.0  | 100.0  |
|         | HealthNet              | 100.0              | 78.0        | 75.0    | 100.0  | 100.0  | 100.0  |
|         | Blue Advantage Plus    | 93.0               | 87.0        | 87.0    | 82.0   | 82.0   | 87.0   |
|         | FirstGuard Health Plan | 100.0              | 100.0       | 67.0    | 100.0  | 100.0  | 100.0  |
|         | Central                | 97.0               | 100.0       | 100.0   | 99.0   | 99.0   | 100.0  |
|         | Eastern                | 93.3               | 100.0       | 83.5    | 98.3   | 98.8   | 100.0  |
|         | Western                | 98.3               | 91.3        | 74.0    | 95.5   | 95.5   | 96.8   |
|         | Missouri               | 96.0%              | 96.5%       | 83.0%   | 97.3%  | 97.5%  | 98.7%  |

Table C5

Source: Missouri Department of Insurance, 2001

Note: OT = Occupational Therapy; PT = Physical Therapy; SLP =Speech/Language Therapy.

Rate of Providers per 1,000 Members, by Specialty CY2001

| Health Plan            | Enrollment | Advanced<br>Practice Nurse | Allergy | Anesthesiology | Cardiology | Dentist | Dermatology | Emergency<br>Medicine | Endocrinology | Family<br>Medicine | Gastroenterology | General<br>Medicine | General<br>Surgery | Gynecology | Hematology/<br>Oncology | Infectious<br>Disease | Internal<br>Medicine |
|------------------------|------------|----------------------------|---------|----------------|------------|---------|-------------|-----------------------|---------------|--------------------|------------------|---------------------|--------------------|------------|-------------------------|-----------------------|----------------------|
| HealthCare USA         | 141,905    | 0.76                       | 0.36    | 1.99           | 2.35       | 0.88    | 0.43        | 1.44                  | 0.46          | 2.88               | 0.78             | 1.11                | 1.82               | 0.09       | 1.09                    | 0.39                  | 3.40                 |
| Missouri Care          | 27,821     | 0.00                       | 0.07    | 1.37           | 0.79       | 0.68    | 0.32        | 0.22                  | 0.25          | 9.85               | 0.22             | 0.29                | 1.22               | 0.04       | 0.47                    | 0.25                  | 2.01                 |
| Mercy Health Plan      | 23,105     | 1.69                       | 0.65    | 6.54           | 10.95      | 5.11    | 1.60        | 4.98                  | 0.74          | 6.41               | 2.73             | 0.74                | 6.23               | 0.00       | 4.24                    | 1.08                  | 13.42                |
| Care Partners          | 52,640     | 1.86                       | 1.26    | 8.74           | 7.96       | 2.38    | 1.56        | 2.60                  | 3.51          | 7.70               | 3.03             | 1.43                | 9.18               | 0.48       | 5.02                    | 3.94                  | 8.92                 |
| Community Care Plus    | 34,129     | 2.05                       | 0.23    | 2.81           | 4.40       | 2.14    | 0.53        | 5.04                  | 0.50          | 3.96               | 1.44             | 0.21                | 2.34               | 0.00       | 1.73                    | 0.00                  | 5.74                 |
| Family Health Partners | 44,931     | 0.38                       | 0.33    | 2.49           | 3.09       | 2.18    | 0.09        | 3.54                  | 0.42          | 4.12               | 0.87             | 0.89                | 2.16               | 0.00       | 0.56                    | 0.09                  | 2.11                 |
| HealthNet              | 13,570     | NR                         | NR      | NR             | NR         | NR      | NR          | NR                    | NR            | NR                 | NR               | NR                  | NR                 | NR         | NR                      | NR                    | NR                   |
| Blue Advantage Plus    | 27,108     | 0.00                       | 1.73    | 15.42          | 9.30       | 0.44    | 2.03        | 6.90                  | 0.30          | 7.86               | 2.99             | 0.48                | 3.36               | 0.00       | 2.21                    | 1.33                  | 5.05                 |
| FirstGuard Health Plan | 30,659     | 0.00                       | 0.26    | 4.01           | 4.27       | 2.61    | 0.07        | 4.60                  | 0.59          | 4.60               | 2.38             | 0.29                | 1.76               | 0.16       | 1.01                    | 0.49                  | 3.56                 |
| Missouri               | 395,868    | 0.70                       | 0.44    | 3.59           | 3.70       | 1.47    | 0.56        | 2.64                  | 0.59          | 4.25               | 1.24             | 0.72                | 2.45               | 0.08       | 1.40                    | 0.59                  | 4.02                 |

Rate of Providers per 1,000 Members, by Specialty CY2001 - Continued

| Health Plan            | Nephrology | Neurology | Neurosurgery | OB/GYN | Obstetrics | Ophthalmology | Orthopedics | Otolaryngology | Pathology | Pediatric<br>Cardiology | Pediatric<br>Endocrinology | Pediatric<br>Gastroenterology | Pediatric<br>Hematology/<br>Oncology | Pediatric<br>Infectious<br>Disease | Pediatric<br>Nephrology | Pediatric<br>Pulmonary<br>Disease | Pediatric<br>Rheumatology |
|------------------------|------------|-----------|--------------|--------|------------|---------------|-------------|----------------|-----------|-------------------------|----------------------------|-------------------------------|--------------------------------------|------------------------------------|-------------------------|-----------------------------------|---------------------------|
| HealthCare USA         | 0.61       | 1.21      | 0.21         | 2.89   | 0.11       | 1.86          | 1.21        | 0.71           | 0.99      | 0.13                    | 0.08                       | 0.04                          | 0.10                                 | 0.01                               | 0.03                    | 0.04                              | 0.00                      |
| Missouri Care          | 0.25       | 0.43      | 0.11         | 2.05   | 0.04       | 0.61          | 0.65        | 0.61           | 1.04      | 0.07                    | 0.04                       | 0.00                          | 0.07                                 | 0.04                               | 0.04                    | 0.11                              | 0.04                      |
| Mercy Health Plan      | 2.38       | 3.12      | 0.91         | 10.43  | 0.00       | 21.90         | 4.72        | 1.64           | 3.42      | 0.43                    | 0.22                       | 0.17                          | 0.22                                 | 0.09                               | 0.09                    | 0.22                              | 0.00                      |
| Care Partners          | 0.91       | 4.93      | 0.39         | 7.83   | 0.17       | 7.57          | 2.99        | 1.73           | 1.60      | 0.78                    | 0.43                       | 0.52                          | 0.74                                 | 0.35                               | 0.22                    | 0.26                              | 0.09                      |
| Community Care Plus    | 1.32       | 1.03      | 0.29         | 3.81   | 0.00       | 7.09          | 2.05        | 0.76           | 1.23      | 0.23                    | 0.06                       | 0.06                          | 0.00                                 | 0.67                               | 0.15                    | 0.18                              | 0.00                      |
| Family Health Partners | 0.56       | 0.78      | 0.22         | 1.96   | 0.00       | 5.81          | 1.14        | 1.02           | 0.85      | 0.36                    | 0.22                       | 0.11                          | 0.20                                 | 0.11                               | 0.20                    | 0.07                              | 0.04                      |
| HealthNet              | NR         | NR        | NR           | NR     | NR         | NR            | NR          | NR             | NR        | NR                      | NR                         | NR                            | NR                                   | NR                                 | NR                      | NR                                | NR                        |
| Blue Advantage Plus    | 1.70       | 1.33      | 0.48         | 8.71   | 0.07       | 5.28          | 1.51        | 2.43           | 5.64      | 0.96                    | 0.37                       | 0.48                          | 0.52                                 | 0.44                               | 0.26                    | 0.11                              | 0.41                      |
| FirstGuard Health Plan | 1.04       | 0.39      | 0.88         | 3.10   | 0.23       | 3.56          | 1.14        | 1.21           | 0.91      | 0.59                    | 0.23                       | 0.16                          | 0.26                                 | 0.13                               | 0.23                    | 0.07                              | 0.10                      |
| Missouri               | 0.80       | 1.23      | 0.31         | 3.63   | 0.08       | 4.34          | 1.42        | 0.94           | 1.38      | 0.30                    | 0.14                       | 0.12                          | 0.17                                 | 0.14                               | 0.10                    | 0.08                              | 0.05                      |

Table C6

Rate of Providers per 1,000 Members, by Specialty CY2001 - Continued

| Health Plan            | Pediatrics | Physical<br>Medicine/<br>Rehab | Plastic<br>Surgery | Podiatry | Psychiatrist,<br>Adult/General | Psychiatrist,<br>Child/Adolescent | Psychologists/<br>Other<br>Therapists | Pulmonary<br>Disease | Radiology | Rheumatology | Thoracic<br>Surgery | Urology | Vision<br>Care/Primary<br>Eye Care | TOTALS | # OF<br>PROVIDER<br>REPS | PHYSICIANS/<br>PROVIDER<br>REPS |
|------------------------|------------|--------------------------------|--------------------|----------|--------------------------------|-----------------------------------|---------------------------------------|----------------------|-----------|--------------|---------------------|---------|------------------------------------|--------|--------------------------|---------------------------------|
| HealthCare USA         | 2.97       | 0.18                           | 0.34               | 0.67     | 2.04                           | 0.04                              | 7.16                                  | 0.61                 | 1.32      | 0.20         | 0.41                | 0.68    | 1.84                               | 48.91  | 12                       | 578.3                           |
| Missouri Care          | 2.44       | 0.47                           | 0.18               | 0.36     | 3.31                           | 0.00                              | 11.14                                 | 0.25                 | 1.51      | 0.29         | 0.22                | 0.40    | 0.79                               | 45.58  | 2                        | 634.0                           |
| Mercy Health Plan      | 10.86      | 1.04                           | 1.56               | 6.80     | 12.25                          | 0.13                              | 6.80                                  | 1.86                 | 7.05      | 0.61         | 0.69                | 2.90    | 0.04                               | 169.62 | 5                        | 783.8                           |
| Care Partners          | 8.61       | 0.43                           | 0.95               | 2.03     | 3.68                           | 2.03                              | 14.46                                 | 3.20                 | 1.13      | 1.13         | 1.00                | 1.60    | 6.06                               | 147.37 | 6                        | 567.5                           |
| Community Care Plus    | 5.57       | 0.56                           | 0.38               | 1.76     | 2.78                           | 0.32                              | 9.43                                  | 0.97                 | 3.08      | 0.12         | 0.41                | 0.62    | 0.00                               | 78.03  | 4                        | 665.8                           |
| Family Health Partners | 4.38       | 0.62                           | 0.33               | 0.73     | 2.05                           | 0.04                              | 4.90                                  | 0.42                 | 6.83      | 0.09         | 0.38                | 0.67    | 0.00                               | 58.42  | 3                        | 875.0                           |
| HealthNet              | NR         | NR                             | NR                 | NR       | NR                             | NR                                | NR                                    | NR                   | NR        | NR           | NR                  | NR      | NR                                 | NR     | NR                       | NR                              |
| Blue Advantage Plus    | 11.92      | 0.66                           | 0.63               | 6.20     | 1.44                           | 0.00                              | 1.36                                  | 1.62                 | 8.26      | 0.07         | 0.96                | 0.48    | 21.29                              | 144.98 | 5                        | 786.0                           |
| FirstGuard Health Plan | 3.75       | 0.49                           | 0.26               | 0.88     | 1.47                           | 0.88                              | 7.37                                  | 0.75                 | 6.16      | 0.10         | 0.46                | 0.55    | 6.69                               | 74.69  | 5                        | 458.0                           |
| Missouri               | 4.46       | 0.39                           | 0.41               | 1.51     | 2.58                           | 0.24                              | 6.62                                  | 0.83                 | 3.14      | 0.23         | 0.44                | 0.74    | 3.05                               | 68.31  | 42                       | 643.8                           |

Table C6 - Continued

Source: Missouri Department of Insurance 2001

Note:

For Blue Advantage Plus, Community Care Plus, Family Health Partners, and Mercy Health Plans for Gynecology &amp; Obstetrics, see OB/GYN

For Blue Advantage+, 8 of the Adult/general Psychiatrists also specialize in Child/Adolescent Psychiatry

For Care Partners, 16 of the Adult/General Psychiatrists also specialize in Child/Adolescent Psychiatry &amp; 44 of the Child/Adolescent Psychiatrists also specialize in Adult/General Psychiatry

For Community Care Plus, Family Health Partners and Mercy Health Plans Vision Care/Primary Eye Care, see Ophthalmology

For Community Care Plus, 63 of the Adult/General Psychiatrists also specialize in Child/Adolescent Psychiatry

For HealthCare USA, 74 of the Adult/General Psychiatrists have Child/Adolescent Psychiatry as a secondary specialty

For Mercy Health Plans, 83 of the Cardiologists have Internal Medicine as a secondary specialty

For Mercy Health Plans, 4 of the Adult/General Psychiatrists have Child/Adolescent Psychiatry as a secondary specialty

For Missouri Care, 64 Adult/General Psychiatrists have Child/Adolescent Psychiatry as a secondary specialty.

NR = Not Reported.

**Facilities per 1,000 Members, 2001**

|                      | Enrollment    | Basic<br>Hospital | Secondary<br>Hospital | Tertiary<br>Hospital | Pharmacy    | Alcohol/Chemical<br>Dependency<br>Inpatient | Child/Adolescent<br>Inpatient | Adult<br>Inpatient | Geriatric<br>Inpatient | Child/Adolescent<br>Outpatient | Adult<br>Outpatient | Geriatric<br>Outpatient | Total        |
|----------------------|---------------|-------------------|-----------------------|----------------------|-------------|---|-------------------------------|--------------------|------------------------|--------------------------------|---------------------|-------------------------|--------------|
| HealthCare USA       | 141,905       | 0.31              | 0.23                  | 0.01                 | 5.32        | 0.37  | 0.27                          | 0.35               | 0.24                   | 0.47                           | 0.44                | 0.25                    | <b>8.26</b>  |
| Missouri Care        | 27,821        | 0.58              | 0.36                  | 0.04                 | 6.90        | 0.93  | 0.61                          | 0.83               | 0.54                   | 2.77                           | 3.77                | 1.62                    | <b>18.94</b> |
| Mercy Health Plan    | 23,105        | 1.82              | 1.26                  | 0.09                 | 14.24       | 0.35  | 0.39                          | 0.87               | 0.82                   | 0.69                           | 0.82                | 0.74                    | <b>22.07</b> |
| Care Partners        | 52,640        | 0.55              | 0.36                  | 0.02                 | 5.62        | 0.19  | 0.09                          | 0.34               | 0.34                   | 0.25                           | 0.42                | 0.42                    | <b>8.61</b>  |
| Community Care Plu   | 34,129        | 0.59              | 0.32                  | 0.00                 | 33.78       | 0.76  | 0.50                          | 0.67               | 0.44                   | 2.34                           | 3.16                | 1.35                    | <b>43.92</b> |
| Family Health Partne | 44,931        | 0.69              | 0.40                  | 0.04                 | 9.95        | 0.24  | 0.22                          | 0.16               | 0.09                   | 0.82                           | 0.67                | 0.60                    | <b>13.89</b> |
| HealthNet            | 13,570        | NR                | NR                    | NR                   | NR          | NR  | NR                            | NR                 | NR                     | NR                             | NR                  | NR                      | <b>NR</b>    |
| Blue Advantage Plus  | 27,108        | 0.92              | 0.59                  | 0.07                 | 8.52        | 0.30  | 0.33                          | 0.37               | 0.33                   | 2.25                           | 1.88                | 1.59                    | <b>17.15</b> |
| FirstGuard Health Pl | 30,659        | 0.75              | 0.42                  | 0.07                 | 7.89        | 0.68  | 0.72                          | 0.72               | 0.72                   | 1.63                           | 1.60                | 1.57                    | <b>16.77</b> |
| <b>Missouri</b>      | <b>30,660</b> | <b>0.58</b>       | <b>0.38</b>           | <b>0.03</b>          | <b>9.21</b> | <b>0.41</b>                                 | <b>0.32</b>                   | <b>0.44</b>        | <b>0.34</b>            | <b>1.01</b>                    | <b>1.13</b>         | <b>0.71</b>             | <b>14.56</b> |

**Table C7**

Source: Missouri Department of Insurance (Enrollment as of December 31, 2001)

Note: NR = Not Reported.

Ancillary providers per 1,000 Members, 2001

| Western<br>Central<br>Eastern | Health Plan            | Enrollment     | Audiology   | Home Health Services | Hospice Services | Intermediate Care Facility | Occupational Therapy | Physical Therapy | Skilled Nursing Facility | Speech Therapy | Total       |
|-------------------------------|------------------------|----------------|-------------|----------------------|------------------|----------------------------|----------------------|------------------|--------------------------|----------------|-------------|
|                               | HealthCare USA         | 141,905        | 0.39        | 0.13                 | 0.06             | 0.00                       | 0.36                 | 0.47             | 0.00                     | 0.32           | 1.73        |
|                               | Missouri Care          | 27,821         | 0.36        | 0.11                 | 0.04             | 0.00                       | 0.75                 | 0.75             | 0.11                     | 0.79           | 2.91        |
|                               | Mercy Health Plan      | 23,105         | 0.30        | 1.60                 | 1.00             | 0.09                       | 0.69                 | 3.29             | 1.13                     | 0.09           | 8.18        |
|                               | Care Partners          | 52,640         | 0.02        | 0.23                 | 0.02             | 0.28                       | 0.40                 | 0.44             | 0.32                     | 0.44           | 2.15        |
|                               | Community Care Plus    | 34,129         | 0.06        | 0.97                 | 0.09             | 0.03                       | 0.29                 | 0.53             | 0.03                     | 0.29           | 2.29        |
|                               | Family Health Partners | 44,931         | 0.62        | 0.47                 | 0.04             | 0.00                       | 0.73                 | 0.69             | 0.11                     | 0.96           | 3.63        |
|                               | HealthNet              | 13,570         | NR          | NR                   | NR               | NR                         | NR                   | NR               | NR                       | NR             | NR          |
|                               | Blue Advantage Plus    | 27,108         | 1.36        | 0.74                 | 0.41             | 0.00                       | 0.92                 | 1.92             | 0.85                     | 0.96           | 7.16        |
|                               | FirstGuard Health Plan | 30,659         | 0.75        | 0.59                 | 0.10             | 0.00                       | 0.82                 | 0.91             | 0.75                     | 0.98           | 4.89        |
|                               | <b>Missouri</b>        | <b>395,868</b> | <b>0.41</b> | <b>0.41</b>          | <b>0.13</b>      | <b>0.05</b>                | <b>0.51</b>          | <b>0.80</b>      | <b>0.25</b>              | <b>0.51</b>    | <b>3.07</b> |

**Table C8**

Source: Missouri Department of Insurance (as of December 31, 2001)

Note: NR = Not Reported.

**MC+ and Commercial Enrollment, 1998-2000**

| HMO                    | 1998           |                |                  | 1999           |                |                  | 2000           |                |                  | % Change from 1998-2000 |              |
|------------------------|----------------|----------------|------------------|----------------|----------------|------------------|----------------|----------------|------------------|-------------------------|--------------|
|                        | Commercial     | MC+            | % MC+ Enrollment | Commercial     | MC+            | % MC+ Enrollment | Commercial     | MC+            | % MC+ Enrollment | Commercial              | MC+          |
| HealthCare USA         | NA             | 81,505         | 100.0%           | NA             | 97,461         | 100.0%           | NA             | 119,399        | 100.0%           | NA                      | 46.5%        |
| Missouri Care          | NA             | 11,639         | 100.0            | NA             | 16,429         | 100.0            | NA             | 20,954         | 100.0            | NA                      | 80.0         |
| Prudential             | 58,111         | 13,077         | 18.4             | 52,353         | 12,089         | 18.8             | NA             | NA             | NA               | NA                      | NA           |
| Mercy Health Plan      | 107,497        | 11,013         | 9.3              | 114,061        | 14,126         | 11.0             | 104,717        | 17,466         | 14.3             | (2.6%)                  | 58.6         |
| Care Partners          | 69,039         | 33,247         | 32.5             | 67,555         | 42,893         | 38.8             | 42,733         | 47,128         | 52.4             | (38.1%)                 | 41.8         |
| Community Care Plus    | NA             | 18,746         | 100.0            | NA             | 21,205         | 100.0            | NA             | 25,487         | 100.0            | NA                      | 36.0         |
| Family Health Partners | NA             | 30,426         | 100.0            | NA             | 36,625         | 100.0            | NA             | 40,252         | 100.0            | NA                      | 32.3         |
| HealthNet              | 27,079         | 10,932         | 28.8             | 31,192         | 12,312         | 28.3             | 45,362         | 14,163         | 23.8             | 67.5%                   | 29.6         |
| Blue Advantage Plus    | 35,096         | 15,435         | 30.5             | 34,787         | 21,002         | 37.6             | 31,511         | 24,338         | 43.6             | (10.2%)                 | 57.7         |
| FirstGuard Health Plan | 1,893          | 19,545         | 91.2             | 4,606          | 23,285         | 83.5             | 6,805          | 26,437         | 79.5             | 259.5%                  | 35.3         |
| <b>Missouri</b>        | <b>298,715</b> | <b>245,565</b> | <b>45.1%</b>     | <b>304,554</b> | <b>297,427</b> | <b>49.4%</b>     | <b>231,128</b> | <b>335,624</b> | <b>59.2%</b>     | <b>55.2%</b>            | <b>46.4%</b> |

**Table C9**

Source: *A Profile of Missouri HMO's; Missouri Hospital Association, 2001 Edition*

Note: The information for health plans operating in more than one region was aggregated, and was not able to be separated by region. Prudential Health Plan did not provide services to MC+ beneficiaries after 1999.

NA = Not Applicable.



**Age Categories for MC+ Members by Health Plan**

|                 | Health Plan            | Age Categories |               |               |               |               |               |               |                | Total          |
|-----------------|------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
|                 |                        | < 1            | 1 - 2         | 3 - 5         | 6 - 9         | 10 - 14       | 15 - 18       | 19 - 20       | 21 >           |                |
| Central         | HealthCare USA         | 728            | 3,517         | 4,662         | 5,402         | 5,940         | 3,724         | 1,232         | 7,945          | 33,150         |
|                 | Care Partners          | 6              | 360           | 576           | 703           | 740           | 501           | 187           | 1,061          | 4,134          |
|                 | Missouri Care          | 706            | 3,019         | 3,779         | 4,532         | 5,159         | 3,292         | 1,135         | 7,437          | 29,059         |
| Eastern         | Mercy Health Plan      | 508            | 2,424         | 3,154         | 3,953         | 4,814         | 3,111         | 964           | 6,285          | 25,213         |
|                 | Care Partners          | 1,079          | 4,965         | 6,687         | 9,167         | 10,576        | 6,559         | 2,183         | 14,296         | 55,512         |
|                 | Community Care Plus    | 623            | 2,843         | 4,387         | 6,533         | 7,196         | 4,437         | 1,278         | 8,821          | 36,118         |
| Western         | HealthCare USA         | 2,543          | 11,678        | 16,014        | 20,679        | 22,462        | 12,913        | 4,314         | 26,179         | 116,782        |
|                 | Family Health Partners | 1,146          | 5,215         | 6,970         | 8,659         | 9,670         | 5,770         | 1,684         | 9,735          | 48,849         |
|                 | HealthNet              | 452            | 2,071         | 2,462         | 2,644         | 2,865         | 1,794         | 663           | 3,990          | 16,941         |
|                 | Blue Advantage Plus    | 773            | 3,380         | 4,158         | 4,785         | 5,201         | 3,274         | 1,070         | 7,462          | 30,103         |
|                 | FirstGuard Health Plan | 838            | 3,572         | 4,327         | 4,889         | 5,814         | 3,552         | 1,253         | 7,931          | 32,176         |
|                 | <i>Central</i>         | 1,440          | 6,896         | 9,017         | 10,637        | 11,839        | 7,517         | 2,554         | 16,443         | 66,343         |
|                 | <i>Eastern</i>         | 4,753          | 21,910        | 30,242        | 40,332        | 45,048        | 27,020        | 8,739         | 55,581         | 233,625        |
|                 | <i>Western</i>         | 3,209          | 14,238        | 17,917        | 20,977        | 23,550        | 14,390        | 4,670         | 29,118         | 128,069        |
| <b>Missouri</b> |                        | <b>9,402</b>   | <b>43,044</b> | <b>57,176</b> | <b>71,946</b> | <b>80,437</b> | <b>48,927</b> | <b>15,963</b> | <b>101,142</b> | <b>428,037</b> |

**Table C10**

Sources: Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

**Gender of MC+ Members by Health Plan**

|                 | Health Plan            | Male           | Female         | Missing      | Total          |
|-----------------|------------------------|----------------|----------------|--------------|----------------|
|                 |                        |                |                |              |                |
| Central         | HealthCare USA         | 14,315         | 18,585         | 250          | 33,150         |
|                 | Care Partners          | 1,728          | 2,314          | 92           | 4,134          |
|                 | Missouri Care          | 12,295         | 16,425         | 339          | 29,059         |
| Eastern         | Mercy Health Plan      | 10,790         | 14,182         | 241          | 25,213         |
|                 | Care Partners          | 22,305         | 32,770         | 437          | 55,512         |
|                 | Community Care Plus    | 15,016         | 20,861         | 241          | 36,118         |
| Western         | HealthCare USA         | 48,288         | 68,084         | 410          | 116,782        |
|                 | Family Health Partners | 21,310         | 26,991         | 548          | 48,849         |
|                 | HealthNet              | 7,053          | 9,574          | 314          | 16,941         |
|                 | Blue Advantage Plus    | 12,389         | 17,275         | 439          | 30,103         |
|                 | FirstGuard Health Plan | 13,030         | 18,726         | 420          | 32,176         |
|                 | <i>Central</i>         | 28,338         | 37,324         | 681          | 66,343         |
|                 | <i>Eastern</i>         | 96,399         | 135,897        | 1,329        | 233,625        |
|                 | <i>Western</i>         | 53,782         | 72,566         | 1,721        | 128,069        |
| <b>Missouri</b> |                        | <b>178,519</b> | <b>245,787</b> | <b>3,731</b> | <b>428,037</b> |

**Table C11**

Sources: Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

**Race of MC+ Members by Health Plan**

|         | Health Plan            | Caucasian      | African-American | Other        | Unknown       | Total          |
|---------|------------------------|----------------|------------------|--------------|---------------|----------------|
| Central | HealthCare USA         | 27,935         | 4,073            | 539          | 603           | 33,150         |
|         | Care Partners          | 3,132          | 741              | 172          | 89            | 4,134          |
|         | Missouri Care          | 22,861         | 4,845            | 725          | 628           | 29,059         |
| Eastern | Mercy Health Plan      | 14,923         | 8,176            | 715          | 1,399         | 25,213         |
|         | Care Partners          | 14,493         | 36,957           | 1,142        | 2,920         | 55,512         |
|         | Community Care Plus    | 16,317         | 17,538           | 710          | 1,553         | 36,118         |
| Western | HealthCare USA         | 46,021         | 66,224           | 1,597        | 2,940         | 116,782        |
|         | Family Health Partners | 27,991         | 17,792           | 1,688        | 1,378         | 48,849         |
|         | HealthNet              | 9,969          | 5,678            | 749          | 545           | 16,941         |
|         | Blue Advantage Plus    | 17,427         | 10,988           | 984          | 704           | 30,103         |
|         | FirstGuard Health Plan | 14,200         | 16,117           | 972          | 887           | 32,176         |
|         |                        |                |                  |              |               |                |
|         | <i>Central</i>         | 53,928         | 9,659            | 1,436        | 1,320         | 66,343         |
|         | <i>Eastern</i>         | 91,754         | 128,895          | 4,164        | 8,812         | 233,625        |
|         | <i>Western</i>         | 69,587         | 50,575           | 4,393        | 3,514         | 128,069        |
|         | <b>Missouri</b>        | <b>215,269</b> | <b>189,129</b>   | <b>9,993</b> | <b>13,646</b> | <b>428,037</b> |

**Table C12**

Sources: Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

## Encounters per 1000 Members, 2000

| Health Plan            | Physician  |        |        | Outpatient Services |       |       | Ambulatory Encounters <sup>a</sup> |       |       | Hospital Inpatient |     |       |
|------------------------|------------|--------|--------|---------------------|-------|-------|------------------------------------|-------|-------|--------------------|-----|-------|
|                        | Commercial | MC+    | TOTAL  | Commercial          | MC+   | TOTAL | Commercial                         | MC+   | TOTAL | Commercial         | MC+ | TOTAL |
| HealthCare USA         | NA         | 3,131  | 3,131  | NA                  | 216   | 216   | NA                                 | 3,348 | 3,348 | NA                 | 446 | 446   |
| Missouri Care          | NA         | 4,846  | 4,846  | NA                  | 1,095 | 1,095 | NA                                 | 5,941 | 5,941 | NA                 | 543 | 543   |
| Mercy Health Plan      | 3,604      | 2,416  | 3,759  | 2,943               | 1,181 | 3,052 | 6,548                              | 3,597 | 6,810 | 285                | 405 | 354   |
| Care Partners          | 4,330      | 3,084  | 3,708  | 205                 | 773   | 488   | 4,535                              | 3,856 | 4,197 | 197                | 368 | 282   |
| Community Care Plus    | NA         | 2,891  | 2,891  | NA                  | 108   | 108   | NA                                 | 2,999 | 2,999 | NA                 | 318 | 318   |
| Family Health Partners | NA         | 2,790  | 2,790  | NA                  | 29    | 29    | NA                                 | 2,819 | 2,819 | NA                 | 425 | 425   |
| HealthNet              | 4,934      | 3,240  | 5,335  | 432                 | 210   | 363   | 5,367                              | 3,449 | 5,698 | 240                | 394 | 539   |
| Blue Advantage Plus    | 6,168      | 6,301  | 6,222  | 633                 | 145   | 434   | 6,800                              | 6,446 | 6,657 | 266                | 523 | 370   |
| FirstGuard Health Plan | 19,037     | 28,699 | 32,682 | 463                 | 3,757 | 5,786 | 23,250                             | 4,045 | 4,261 | 303                | 448 | 418   |

**Table C13**

Source: 2001 Edition; A Profile of Missouri HMO's; Missouri Hospital Association

Note: The information for health plans operating in more than one region was aggregated, and was not able to be broken out by region. Data do not include services carved-out.

<sup>a</sup> Total Ambulatory encounters is comprised of physician and outpatient services.

## MC+ Behavioral Health Penetration Rate, 1999 - 2000

| Penetration Rate       | Total |      | Age 0-12 |      | Age 13-17 |       | Avg of All Children |      | Age 18-64 |      | Age 64+ |       |
|------------------------|-------|------|----------|------|-----------|-------|---------------------|------|-----------|------|---------|-------|
|                        | 1999  | 2000 | 1999     | 2000 | 1999      | 2000  | 1999                | 2000 | 1999      | 2000 | 1999    | 2000  |
| Health Care USA        | 7.0%  | 7.7% | 5.1%     | 6.2% | 10.0%     | 10.6% | 5.6%                | 8.4% | 11.2%     | 9.7% | 0.0%    | 0.0%  |
| Care Partners          | 2.8   | 5.8  | 2.3      | 3.8  | 3.3       | 8.4   | 1.8                 | 6.1  | 3.7       | 8.4  | 0.0     | 0.0   |
| Missouri Care          | 8.3   | 8.8  | 6.9      | 7.1  | 11.7      | 12.6  | 4.8                 | 9.9  | 9.6       | 10.4 | 0.0     | 100.0 |
| Mercy Health Plan      | 9.1   | 9.1  | 5.9      | 5.5  | 11.2      | 11.2  | 8.2                 | 8.4  | 16.4      | 15.7 | 0.0     | 0.0   |
| Care Partners          | 3.6   | 4.2  | 3.1      | 2.8  | 4.0       | 5.6   | 2.2                 | 4.2  | 4.5       | 6.1  | 0.0     | 0.0   |
| Community Care Plus    | 3.7   | 2.8  | 2.7      | 1.9  | 5.5       | 3.7   | 27.6                | 2.8  | 5.2       | 4.3  | 50.0    | 0.0   |
| Health Care USA        | 3.0   | 4.8  | 2.5      | 3.5  | 4.4       | 7.0   | 1.7                 | 5.2  | 3.5       | 6.9  | 0.0     | 0.0   |
| Family Health Partners | 4.9   | 4.7  | 4.2      | 4.1  | 6.8       | 7.0   | 3.1                 | 5.6  | 6.1       | 4.8  | 0.0     | 0.0   |
| HealthNet              | 6.6   | 5.3  | 5.3      | 4.1  | 9.0       | 8.8   | 5.6                 | 6.4  | 11.2      | 6.3  | 0.0     | 0.0   |
| Blue Advantage Plus    | 4.5   | 4.9  | 3.4      | 3.7  | 6.9       | 7.9   | 3.0                 | 5.8  | 6.0       | 5.6  | 0.0     | 33.3  |
| FirstGuard Health Plan | 3.7%  | 4.4% | 3.1%     | 3.5% | 5.3%      | 5.6%  | 2.1%                | 4.5% | 4.2%      | 5.7% | 0.0%    | 0.0%  |

**Table C14**

Source: Missouri Department of Mental Health and Missouri Department of Social Studies, Mental Health Subcommittee of the Quality Assurance and Improvement Committee for MC+ Health Plans

Note: Data do not include services carved-out.

| MC+ Behavioral Health Utilization Rate, 1999 - 2000 |                |      |                  |      |                      |      |              |      |                                  |      |                       |      |                             |      |                   |       |                      |      |                                      |       |                                     |       |
|---|----------------|------|------------------|------|----------------------|------|--------------|------|----------------------------------|------|-----------------------|------|-----------------------------|------|-------------------|-------|----------------------|------|--------------------------------------|-------|-------------------------------------|-------|
| Utilization Rate                                    | Inpatient Days |      | Residential Days |      | Inpatient Admissions |      | Inpatient SA |      | Inpatient Admissions for SA Days |      | Partial Hospital Days |      | Partial Hospital Admissions |      | Outpatient Visits |       | Alternative Services |      | Ambulatory Follow-up Visit (30 Days) |       | Ambulatory Follow-up Visit (7 Days) |       |
| Year  | 1999           | 2000 | 1999             | 2000 | 1999                 | 2000 | 1999         | 2000 | 1999                             | 2000 | 1999                  | 2000 | 1999                        | 2000 | 1999              | 2000  | 1999                 | 2000 | 1999                                 | 2000  | 1999                                | 2000  |
| Central Health Care USA                             | 27.0           | 49.9 | 0.0              | 0.0  | 6.6                  | 8.7  | 2.0          | 1.9  | 0.6                              | 0.5  | 4.4                   | 1.9  | 1.3                         | 0.6  | 369.2             | 430.8 | 2.7                  | 0.1  | 41.0%                                | 67.8% | 18.0%                               | 38.1% |
| Care Partners                                       | 33.2           | 38.1 | 0.0              | 0.0  | 5.5                  | 8.9  | 4.5          | 8.6  | 1.0                              | 1.3  | 2.6                   | 9.9  | 1.0                         | 6.7  | 84.5              | 147.0 | 0.0                  | NA   | 0.0                                  | 52.2  | 0.0                                 | 30.4  |
| Missouri Care                                       | 23.2           | 32.1 | 0.0              | NA   | 6.6                  | 9.0  | 1.7          | 1.9  | 0.4                              | 0.7  | 5.4                   | 1.3  | 1.8                         | 0.5  | 423.0             | 355.0 | NA                   | NA   | 4.6                                  | 50.4  | 2.7                                 | 22.7  |
| Eastern Mercy Health Plan                           | 58.0           | 55.0 | 0.0              | 0.0  | 12.0                 | 12.0 | 5.0          | 10.0 | 7.0                              | 7.0  | 4.0                   | 7.0  | 1.0                         | 2.0  | 177.0             | 231.0 | NA                   | NA   | 60.0                                 | 57.0  | 21.0                                | 27.0  |
| Care Partners                                       | 29.1           | 47.6 | 0.0              | 0.0  | 4.4                  | 7.5  | 4.8          | 7.1  | 0.9                              | 1.0  | 1.7                   | 2.2  | 0.5                         | 2.0  | 134.7             | 152.9 | 29.1                 | 31.6 | 18.0                                 | 48.0  | 8.0                                 | 21.9  |
| Community Care Plus                                 | 17.1           | 25.4 | 0.0              | NA   | 4.6                  | 7.3  | 1.3          | 1.0  | 0.7                              | 0.3  | 4.1                   | 0.5  | 1.2                         | 0.2  | 117.0             | 112.4 | 6.7                  | NA   | 30.0                                 | 25.4  | 16.6                                | 12.0  |
| Health Care USA                                     | 19.5           | 32.1 | 0.0              | 0.0  | 4.4                  | 6.6  | 3.0          | 3.6  | 1.0                              | 1.1  | 2.1                   | 5.0  | 0.8                         | 1.3  | 186.0             | 211.1 | 5.5                  | 8.3  | 40.3                                 | 41.7  | 21.0                                | 21.9  |
| Western Family Health Partners                      | 17.1           | 30.3 | 0.0              | 0.5  | 4.5                  | 6.4  | 0.1          | 0.4  | 0.0                              | 0.1  | 1.3                   | 2.2  | 0.6                         | 0.8  | 243.2             | 251.2 | 15.4                 | 4.3  | 51.0                                 | 53.3  | 30.0                                | 27.9  |
| HealthNet   | 78.5           | 65.5 | 7.5              | 0.0  | 10.4                 | 12.0 | 5.6          | 18.7 | 0.9                              | 2.2  | 16.9                  | 0.8  | 8.6                         | 0.1  | 300.0             | 282.2 | NA                   | NA   | 54.2                                 | 64.7  | 30.5                                | 41.4  |
| Blue Advantage Plus                                 | 25.7           | 47.5 | 0.8              | 1.9  | 5.7                  | 47.2 | 0.3          | 1.7  | 0.1                              | 1.7  | 4.9                   | 8.6  | 1.3                         | 8.6  | 194.2             | 254.3 | 27.1                 | 46.2 | 43.2                                 | 47.1  | 24.2                                | 31.4  |
| FirstGuard Health Plan                              | 18.1           | 21.0 | 0.0              | NA   | 4.3                  | 5.1  | 0.9          | 1.5  | 0.2                              | 0.5  | 2.8                   | 2.5  | 0.8                         | 0.8  | 213.8             | 316.0 | NA                   | NA   | 51.7                                 | 52.0  | 24.1                                | 29.0  |
| NCQA  |                |      |                  |      |                      |      |              |      |                                  |      |                       |      |                             |      |                   |       |                      |      | 70.1%                                | 71.2% | 47.4%                               | 48.2% |

**Table C15**

Source: Missouri Department of Mental Health and Missouri Department of Social Studies, Mental Health Subcommittee of the Quality Assurance and Improvement Committee for MC+ Health Plans

Note: Inpatient Admissions are calculated per 1,000 discharges. Data do not include services carved-out.

NA = Not Applicable.

**Comparison of Fee-for-Service and Managed Care Groups  
on CAHPS® Survey, All Respondents**

| <b>PERSONAL DOCTOR OR NURSE</b>                                 | <b>N</b> | <b>M</b> | <b>SD</b> |
|---|----------|----------|-----------|
| <b>How much problem to get personal doctor <sup>a</sup></b>     |          |          |           |
| Fee-for-Service   | 309      | 2.69     | 0.59      |
| Managed Care  | 511      | 2.69     | 0.63      |
| <b>Rating of personal doctor <sup>b</sup></b>                   |          |          |           |
| Fee-for-Service   | 582      | 8.43*    | 1.82      |
| Managed Care  | 796      | 8.36     | 2.11      |
| <b>SPECIALIST CARE</b>  | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b>How much problem to get referral to specialist</b>           |          |          |           |
| Fee-for-Service   | 178      | 2.62     | 0.71      |
| Managed Care  | 263      | 2.62     | 0.69      |
| <b>Rating of specialist <sup>b</sup></b>                        |          |          |           |
| Fee-for-Service   | 176      | 7.84     | 2.34      |
| Managed Care  | 199      | 7.98     | 2.54      |
| <b>DOCTOR'S OFFICE</b>  | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b>How often got help when calling doctor's office</b>          |          |          |           |
| Fee-for-Service   | 423      | 2.54*    | 0.70      |
| Managed Care  | 538      | 2.49     | 0.77      |
| <b>How often got appointment as soon as wanted</b>              |          |          |           |
| Fee-for-Service   | 423      | 2.37     | 0.80      |
| Managed Care  | 591      | 2.38     | 0.87      |
| <b>How often got care as soon as wanted <sup>a</sup></b>        |          |          |           |
| Fee-for-Service   | 453      | 2.51*    | 0.76      |
| Managed Care  | 418      | 2.37     | 0.92      |
| <b>How often went to emergency room <sup>c</sup></b>            |          |          |           |
| Fee-for-Service   | 690      | 2.98*    | 15.77     |
| Managed Care  | 1016     | 5.24     | 21.36     |
| <b>How much of a problem to get care <sup>a</sup></b>           |          |          |           |
| Fee-for-Service   | 540      | 2.86     | 0.41      |
| Managed Care  | 715      | 2.81     | 0.50      |
| <b>How often waited more than 15 minutes <sup>a</sup></b>       |          |          |           |
| Fee-for-Service   | 541      | 1.61     | 1.03      |
| Managed Care  | 707      | 1.72     | 1.02      |
| <b>How often treated with courtesy and respect <sup>a</sup></b> |          |          |           |
| Fee-for-Service   | 539      | 2.70     | 0.63      |
| Managed Care  | 688      | 2.67     | 0.65      |
| <b>How often doctor's office staff helpful <sup>a</sup></b>     |          |          |           |
| Fee-for-Service   | 538      | 2.53     | 0.72      |
| Managed Care  | 689      | 2.54     | 0.72      |
| <b>How often staff listened carefully <sup>a</sup></b>          |          |          |           |
| Fee-for-Service   | 540      | 2.54     | 0.71      |
| Managed Care  | 689      | 2.57     | 0.72      |
| <b>How often hard time due to different language</b>            |          |          |           |
| Fee-for-Service   | 540      | 2.72     | 0.63      |
| Managed Care  | 714      | 2.74     | 0.65      |
| <b>How often explained so could understand <sup>a</sup></b>     |          |          |           |
| Fee-for-Service   | 540      | 2.48     | 0.74      |
| Managed Care  | 690      | 2.56     | 0.73      |
| <b>How often showed respect for what was said <sup>a</sup></b>  |          |          |           |
| Fee-for-Service   | 538      | 2.55     | 0.66      |
| Managed Care  | 687      | 2.60     | 0.71      |

Table C16

**Comparison of Fee-for-Service and Managed Care Groups  
on CAHPS® Survey, All Respondents - Continued**

| <b>DOCTOR'S OFFICE</b>  | <b>N</b> | <b>M</b> | <b>SD</b> |
|---|----------|----------|-----------|
| <b>How often doctors spent enough time <sup>a</sup></b>         |          |          |           |
| Fee-for-Service   | 536      | 2.35     | 0.79      |
| Managed Care  | 690      | 2.40     | 0.79      |
| <b>Rating of health care <sup>b</sup></b>                       |          |          |           |
| Fee-for-Service   | 548      | 8.17     | 1.88      |
| Managed Care  | 717      | 8.31     | 1.97      |
| <b>How often got interpreter when needed <sup>a</sup></b>       |          |          |           |
| Fee-for-Service   | 123      | 0.41     | 0.98      |
| Managed Care  | 203      | 0.27     | 0.76      |
| <b>DENTAL CARE</b>  | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b>How many times went to dentist <sup>c</sup></b>              |          |          |           |
| Fee-for-Service   | 373      | 1.46*    | 1.36      |
| Managed Care  | 459      | 1.27     | 1.34      |
| <b>Rating of dental care <sup>b</sup></b>                       |          |          |           |
| Fee-for-Service   | 317      | 7.33     | 3.05      |
| Managed Care  | 334      | 7.28     | 3.09      |
| <b>BEHAVIORAL HEALTH CARE</b>                                   | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b>How much problem to get treatment/</b>                       |          |          |           |
| Fee-for-Service   | 154      | 2.62     | 0.70      |
| Managed Care  | 156      | 2.53     | 0.75      |
| <b>Rating of treatment or counseling <sup>b</sup></b>           |          |          |           |
| Fee-for-Service   | 154      | 7.54     | 2.56      |
| Managed Care  | 167      | 7.38     | 2.90      |
| <b>PHARMACY</b>   | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b>How much of a problem to get a prescription <sup>a</sup></b> |          |          |           |
| Fee-for-Service   | 502      | 2.84     | 0.45      |
| Managed Care  | 612      | 2.88     | 0.40      |
| <b>How often got a prescription <sup>a</sup></b>                |          |          |           |
| Fee-for-Service   | 500      | 2.69     | 0.71      |
| Managed Care  | 585      | 2.67     | 0.74      |
| <b>COMPOSITE SCORES</b>   | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b>Getting need care</b>  |          |          |           |
| Fee-for-Service   | 599      | 2.81***  | 0.41      |
| Managed Care  | 842      | 2.76     | 0.50      |
| <b>Doctor communicated well with patients</b>                   |          |          |           |
| Fee-for-Service   | 543      | 2.48     | 0.60      |
| Managed Care  | 701      | 2.54     | 0.61      |
| <b>Treated with respect, courtesy, helpfulness</b>              |          |          |           |
| Fee-for-Service   | 541      | 2.63     | 0.55      |
| Managed Care  | 695      | 2.62     | 0.59      |
| <b>No long waits</b>  |          |          |           |
| Fee-for-Service   | 593      | 2.28*    | 0.55      |
| Managed Care  | 805      | 2.25     | 0.59      |

**Table C16 - Continued**

Source: Department of Social Services, Consumer Assessment of Health Plans Data, Missouri 2000

Notes: Independent sample t-tests were conducted on all variables for Managed care and Fee-for-service groups.

Independent sample t-tests were conducted on all variables for Managed care and Fee-for-service groups.

<sup>a</sup> Rating scale ranged from 1 to 3, with a higher number representing a more positive response. For the responses asking "How often..", 1 = "sometimes" or "never", 2 = "usually", and 3 = "always". For those asking about "How much of a problem..", 1 = "big problem", 2 = "small problem", and 3 = "not a problem".

<sup>b</sup> Rating scale ranged from 1 to 10, with a higher number representing a more positive rating.

<sup>c</sup> This item requested the respondent to fill in the blank.

\*p < .05

\*\* p < .01

\*\*\* p < .001

**Comparison of Fee-for-Service and Managed Care Regions on CAHPS® Surveys,  
All Respondants, 2000**

| <b>PERSONAL DOCTOR OR NURSE</b>  | <b>N</b> | <b>M</b> | <b>SD</b> |
|--|----------|----------|-----------|
| <b><i>How much of a problem to get personal doctor <sup>a</sup></i></b>        |          |          |           |
| Central  | 373      | 2.68     | 0.63      |
| Eastern  | 102      | 2.52     | 0.69      |
| Western  | 403      | 2.69     | 0.62      |
| Other  | 462      | 2.63     | 0.67      |
| <b><i>Rating of personal doctor <sup>b</sup></i></b>                           |          |          |           |
| Central  | 464      | 8.06*    | 2.38      |
| Eastern  | 206      | 8.15     | 2.26      |
| Western  | 717      | 8.43     | 1.96      |
| Other  | 831      | 8.46     | 1.84      |
| <b>SPECIALIST CARE</b>   | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b><i>How much of a problem to get referral to specialist <sup>a</sup></i></b> |          |          |           |
| Central  | 206      | 2.52*    | 0.75      |
| Eastern  | 75       | 2.44     | 0.83      |
| Western  | 242      | 2.67     | 0.64      |
| Other  | 295      | 2.62     | 0.72      |
| <b><i>Rating of specialist <sup>b</sup></i></b>                                |          |          |           |
| Central  | 158      | 7.67     | 2.82      |
| Eastern  | 74       | 7.74     | 2.94      |
| Western  | 200      | 8.30     | 2.26      |
| Other  | 280      | 7.90     | 2.21      |
| <b>DOCTOR'S OFFICE</b>   | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b><i>How often got help when calling doctor's office <sup>a</sup></i></b>     |          |          |           |
| Central  | 380      | 2.38*    | 0.86      |
| Eastern  | 156      | 2.47     | 0.81      |
| Western  | 509      | 2.53     | 0.73      |
| Other  | 633      | 2.49     | 0.75      |
| <b><i>How often got appt. as soon as wanted <sup>a</sup></i></b>               |          |          |           |
| Central  | 279      | 2.19**   | 1.03      |
| Eastern  | 143      | 2.44     | 0.83      |
| Western  | 401      | 2.47     | 0.82      |
| Other  | 641      | 2.43     | 0.79      |
| <b><i>How often got care as soon as wanted <sup>a</sup></i></b>                |          |          |           |
| Central  | 414      | 2.22***  | 0.97      |
| Eastern  | 154      | 2.35     | 0.90      |
| Western  | 531      | 2.43     | 0.82      |
| Other  | 644      | 2.34     | 0.83      |
| <b><i>How often went to emergency room <sup>a</sup></i></b>                    |          |          |           |
| Central  | 670      | 0.67*    | 1.65      |
| Eastern  | 247      | 4.93     | 20.41     |
| Western  | 880      | 4.58     | 19.82     |
| Other  | 1015     | 3.64     | 17.26     |
| <b><i>How much of a problem to get care <sup>a</sup></i></b>                   |          |          |           |
| Central  | 482      | 2.70***  | 0.61      |
| Eastern  | 192      | 2.76     | 0.59      |
| Western  | 643      | 2.82     | 0.47      |
| Other  | 801      | 2.83     | 0.46      |
| <b><i>How often waited more than 15 minutes <sup>a</sup></i></b>               |          |          |           |
| Central  | 474      | 1.71*    | 1.02      |
| Eastern  | 189      | 1.78     | 1.01      |
| Western  | 633      | 1.61     | 1.01      |
| Other  | 800      | 1.57     | 1.03      |
| <b><i>How often treated with courtesy and respect <sup>a</sup></i></b>         |          |          |           |
| Central  | 465      | 2.58**   | 0.74      |
| Eastern  | 190      | 2.72     | 0.58      |
| Western  | 629      | 2.71     | 0.60      |
| Other  | 795      | 2.64     | 0.69      |

Table C17

**Comparison of Fee-for-Service and Managed Care Regions on CAHPS® Surveys,  
All Respondants, 2000 - Continued**

| <b>DOCTOR'S OFFICE</b>  | <b>N</b> | <b>M</b> | <b>SD</b> |
|---|----------|----------|-----------|
| <b><i>How often doctor's staff helpful<sup>a</sup></i></b>              |          |          |           |
| Central   | 464      | 2.42**   | 0.82      |
| Eastern   | 189      | 2.53     | 0.71      |
| Western   | 626      | 2.57     | 0.68      |
| Other   | 795      | 2.48     | 0.75      |
| <b><i>How often staff listened carefully<sup>a</sup></i></b>            |          |          |           |
| Central   | 461      | 2.46**   | 0.81      |
| Eastern   | 189      | 2.55     | 0.72      |
| Western   | 630      | 2.61     | 0.68      |
| Other   | 797      | 2.49     | 0.74      |
| <b><i>How often hard time due to different language<sup>a</sup></i></b> |          |          |           |
| Central   | 477      | 2.73     | 0.67      |
| Eastern   | 189      | 2.76     | 0.53      |
| Western   | 640      | 2.76     | 0.62      |
| Other   | 804      | 2.74     | 0.61      |
| <b><i>How often explained so could understand<sup>a</sup></i></b>       |          |          |           |
| Central   | 464      | 2.50     | 0.79      |
| Eastern   | 190      | 2.48     | 0.78      |
| Western   | 629      | 2.58     | 0.71      |
| Other   | 798      | 2.48     | 0.76      |
| <b><i>How often showed respect for what said<sup>a</sup></i></b>        |          |          |           |
| Central   | 461      | 2.50*    | 0.78      |
| Eastern   | 189      | 2.51     | 0.71      |
| Western   | 628      | 2.61     | 0.67      |
| Other   | 793      | 2.51     | 0.72      |
| <b><i>How often doctors spent enough time<sup>a</sup></i></b>           |          |          |           |
| Central   | 464      | 2.24***  | 0.91      |
| Eastern   | 189      | 2.42     | 0.81      |
| Western   | 629      | 2.42     | 0.75      |
| Other   | 794      | 2.31     | 0.82      |
| <b><i>Rating of overall health care<sup>b</sup></i></b>                 |          |          |           |
| Central   | 488      | 7.92*    | 2.33      |
| Eastern   | 189      | 8.12     | 2.09      |
| Western   | 641      | 8.32     | 1.83      |
| Other   | 811      | 8.09     | 1.93      |
| <b><i>How often got interpreter when needed<sup>a</sup></i></b>         |          |          |           |
| Central   | 144      | 0.28     | 0.74      |
| Eastern   | 42       | 0.21     | 0.72      |
| Western   | 177      | 0.21     | 0.68      |
| Other   | 169      | 0.43     | 1.01      |
| <b>DENTAL CARE</b>  | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b><i>How many times went to dentist<sup>c</sup></i></b>                |          |          |           |
| Central   | 283      | 1.25*    | 1.39      |
| Eastern   | 84       | 1.27     | 1.53      |
| Western   | 350      | 1.09     | 1.27      |
| Other   | 478      | 1.38     | 1.35      |
| <b>BEHAVIORAL HEALTH CARE</b>   | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b><i>How much problem to get treatment/ counseling<sup>a</sup></i></b> |          |          |           |
| Central   | 81       | 2.52     | 0.74      |
| Eastern   | 41       | 2.24     | 0.89      |
| Western   | 127      | 2.52     | 0.78      |
| Other   | 202      | 2.53     | 0.77      |
| <b>PHARMACY</b>   | <b>N</b> | <b>M</b> | <b>SD</b> |
| <b><i>How much of a problem to get a prescription<sup>a</sup></i></b>   |          |          |           |
| Central   | 406      | 2.81     | 0.51      |
| Eastern   | 186      | 2.61     | 0.65      |
| Western   | 580      | 2.83     | 0.47      |
| Other   | 763      | 2.83     | 0.45      |

**Table C17 - Continued**



**Comparison of Fee-for-Service and Managed Care Regions on CAHPS® Surveys,  
All Respondants, 2000 - Continued**

| <b>HEALTH STATUS</b>                                     | <b>N</b> | <b>M</b> | <b>SD</b> |
|--|----------|----------|-----------|
| <b><i>Rating of Dental Care<sup>b</sup></i></b>          |          |          |           |
| Central  | 196      | 7.32***  | 3.16      |
| Eastern  | 56       | 5.50     | 3.54      |
| Western  | 243      | 7.12     | 3.25      |
| Other  | 382      | 7.28     | 3.13      |
| <b><i>Rating of Treatment/Counseling<sup>b</sup></i></b> |          |          |           |
| Central  | 95       | 7.08*    | 2.94      |
| Eastern  | 41       | 6.07     | 3.33      |
| Western  | 134      | 7.76     | 2.90      |
| Other  | 199      | 7.32     | 2.89      |
| <b><i>How often got Prescription<sup>a</sup></i></b>     |          |          |           |
| Central  | 383      | 2.55***  | 0.84      |
| Eastern  | 183      | 2.60     | 0.79      |
| Western  | 560      | 2.66     | 0.76      |
| Other  | 757      | 2.65     | 0.73      |

**Table C17 - Continued**

*Source: Department of Social Services, Consumer Assessment of Health Plans Data, Missouri 2000*

Note: Analysis of Variance was conducted on all variables for each region.

<sup>a</sup> Rating scale ranged from 1 to 3, with a higher number representing a more positive response. For the responses asking "How often...", 1 = "sometimes" or "never", 2 = "usually", and 3 = "always". For those asking about "How much of a problem?", 1 = "big problem", 2 = "small problem", and 3 = "not a problem".

<sup>b</sup> Rating scale ranged from 1 to 10, with a higher number representing a more positive rating.

<sup>c</sup> This item requested the respondent to fill in the blank.

\* $p < .05$

\*\* $p < .01$

\*\*\* $p < .001$

CAHPS Survey Ratings, 2001

|         | Health Plan            | Rating of Personal Doctor |       |       | Rating of Specialist |       |       | Rating of All Health Care |       |       | Rating of Health Plan |       |       |
|---------|------------------------|---------------------------|-------|-------|----------------------|-------|-------|---------------------------|-------|-------|-----------------------|-------|-------|
|         |                        | 0-6                       | 7-8   | 9-10  | 0-6                  | 7-8   | 9-10  | 0-6                       | 7-8   | 9-10  | 0-6                   | 7-8   | 9-10  |
| Central | HealthCare USA         | 15.9%                     | 24.1% | 60.1% | 18.6%                | 23.3% | 58.1% | 15.4%                     | 27.4% | 57.2% | 18.1%                 | 27.8% | 54.1% |
|         | Care Partners          | 15.8                      | 26.3  | 57.9  | 20.0                 | 40.0  | 40.0  | 33.3                      | 16.7  | 50.0  | 33.3                  | 22.2  | 44.4  |
|         | Missouri Care          | 10.6                      | 20.7  | 68.8  | 16.7                 | 24.2  | 59.1  | 19.1                      | 29.1  | 51.8  | 19.8                  | 28.9  | 51.4  |
| Eastern | Mercy Health Plan      | 18.7                      | 28.3  | 53.0  | 22.0                 | 27.5  | 50.5  | 19.3                      | 32.5  | 48.1  | 22.6                  | 25.9  | 51.5  |
|         | Care Partners          | 17.0                      | 32.1  | 50.9  | 13.3                 | 38.7  | 48.0  | 20.6                      | 28.5  | 50.9  | 19.1                  | 26.8  | 54.2  |
|         | Community Care Plus    | 16.2                      | 30.5  | 53.2  | 12.5                 | 26.8  | 60.7  | 18.3                      | 33.1  | 48.6  | 18.6                  | 31.9  | 49.6  |
| Western | HealthCare USA         | 13.6                      | 29.1  | 57.3  | 30.5                 | 22.0  | 47.5  | 18.4                      | 29.1  | 52.6  | 18.4                  | 25.4  | 56.2  |
|         | Family Health Partners | 20.6                      | 20.6  | 58.8  | 22.2                 | 18.5  | 59.3  | 20.0                      | 29.7  | 50.3  | 23.2                  | 28.1  | 48.7  |
|         | HealthNet              | 21.4                      | 33.9  | 44.6  | 22.7                 | 22.7  | 54.5  | 31.1                      | 16.4  | 52.5  | 24.3                  | 32.4  | 43.2  |
|         | Blue Advantage Plus    | 19.9                      | 27.6  | 52.6  | 34.0                 | 15.1  | 50.9  | 17.6                      | 28.4  | 54.1  | 19.7                  | 30.1  | 50.3  |
|         | FirstGuard Health Plan | 20.0                      | 21.2  | 58.8  | 27.6                 | 20.7  | 51.7  | 26.4                      | 16.1  | 57.5  | 28.1                  | 26.7  | 45.2  |
|         | <b>Central</b>         | 14.4                      | 23.2  | 62.5  | 18.0                 | 24.4  | 57.6  | 17.0                      | 27.6  | 55.4  | 19.1                  | 27.9  | 53.0  |
|         | <b>Eastern</b>         | 16.5                      | 30.0  | 53.6  | 19.6                 | 29.2  | 51.2  | 19.2                      | 30.7  | 50.1  | 19.7                  | 27.2  | 53.0  |
|         | <b>Western</b>         | 20.3                      | 24.6  | 55.0  | 27.2                 | 18.4  | 54.4  | 21.8                      | 25.2  | 53.0  | 23.3                  | 28.9  | 47.8  |
|         | <b>Missouri</b>        | 16.6                      | 26.2  | 57.2  | 21.0                 | 25.0  | 54.0  | 19.1                      | 28.3  | 52.6  | 20.4                  | 27.9  | 51.7  |
|         | <b>1999 NCBD</b>       | 19.0%                     | 25.0% | 56.0% | 16.0%                | 23.0% | 61.0% | 12.0%                     | 25.0% | 63.0% | 18.0%                 | 27.0% | 56.0% |

**Table C18**

Source: Missouri Division of Medical Services, Department of Social Services, 2001 Consumer Assessment of Health Plans Survey

NCBD = National CAHPS Benchmarking Database; Agency for HealthCare Quality and Research, Annual Report of the National CAHPS Benchmarking Database, 2000: What Consumers Say about the Quality of their Health Plans and Medical Care

Note: The ratings are based on a scale of 0-10 where 0 is the "worst possible" and 10 is the "best possible".

| Member Medical Complaints per 1,000 Members, CY2000-2001 |                         |         |          |                 |      |          |             |      |          |         |      |          |       |      |          |        |      |          |
|--|-------------------------|---------|----------|-----------------|------|----------|-------------|------|----------|---------|------|----------|-------|------|----------|--------|------|----------|
| Health Plan  | Enrollment <sup>a</sup> |         |          | Quality of Care |      |          | Appointment |      |          | Denials |      |          | Other |      |          | TOTALS |      |          |
|  | 2000                    | 2001    | % Change | 2000            | 2001 | % Change | 2000        | 2001 | % Change | 2000    | 2001 | % Change | 2000  | 2001 | % Change | 2000   | 2001 | % Change |
| Central  |                         |         |          |                 |      |          |             |      |          |         |      |          |       |      |          |        |      |          |
| HealthCare USA   | 24,985                  | 29,637  | 18.6%    | 0.24            | 0.57 | 138.9%   | 0.24        | 0.40 | 68.6%    | 0.24    | 0.74 | 209.1%   | 0.20  | 0.37 | 85.5%    | 0.92   | 2.09 | 127.3%   |
| Care Partners <sup>b</sup>                               | 3,801                   | NR      | -        | 0.00            | NR   | -        | 0.26        | NR   | -        | 0.00    | NR   | -        | 0.00  | NR   | -        | 0.26   | NR   | -        |
| Missouri Care  | 20,962                  | 27,821  | 32.7     | 0.24            | 0.25 | 5.5      | 0.00        | 0.36 | -        | 0.19    | 0.54 | 182.5    | 0.00  | 0.04 | -        | 0.43   | 1.19 | 176.3    |
| Eastern  |                         |         |          |                 |      |          |             |      |          |         |      |          |       |      |          |        |      |          |
| Mercy Health Plan  | 18,315                  | 23,105  | 26.2     | 0.27            | 0.35 | 26.8     | 0.00        | 0.22 | -        | 0.11    | 0.00 | (100.0)  | 0.00  | 0.09 | -        | 0.38   | 0.65 | 69.9     |
| Care Partners  | 44,178                  | 52,640  | 19.2     | 0.20            | 0.46 | 123.8    | 0.16        | 0.34 | 113.7    | 0.02    | 0.02 | (16.1)   | 0.18  | 0.49 | 172.8    | 0.59   | 1.31 | 122.7    |
| Community Care Plus                                      | 25,881                  | 34,129  | 31.9     | 0.50            | 0.50 | (0.8)    | 0.08        | 0.21 | 165.4    | 0.15    | 0.26 | 70.6     | 0.27  | 0.06 | (78.3)   | 1.00   | 1.03 | 2.1      |
| Western  |                         |         |          |                 |      |          |             |      |          |         |      |          |       |      |          |        |      |          |
| HealthCare USA   | 97,212                  | 112,268 | 15.5     | 0.28            | 0.38 | 37.9     | 0.07        | 0.16 | 122.7    | 0.12    | 0.43 | 246.4    | 0.24  | 0.50 | 110.8    | 0.71   | 1.47 | 107.1    |
| Family Health Partners                                   | 40,310                  | 44,931  | 11.5     | 0.57            | 0.49 | (14.2)   | 0.17        | 0.04 | (74.4)   | 0.32    | 0.40 | 24.2     | 0.07  | 0.04 | (40.2)   | 1.14   | 0.98 | (14.2)   |
| HealthNet  | 13,550                  | 13,570  | 0.1      | 0.37            | 0.15 | (60.1)   | 0.22        | 0.37 | 66.4     | 0.52    | 0.66 | 28.4     | 0.00  | 0.07 | -        | 1.11   | 1.25 | 13.2     |
| Blue Advantage Plus                                      | 24,525                  | 27,108  | 10.5     | 0.69            | 0.96 | 38.4     | 0.37        | 0.18 | (49.7)   | 0.41    | 0.11 | (72.9)   | 0.08  | 0.07 | (9.5)    | 1.55   | 1.33 | (14.3)   |
| FirstGuard Health Plan                                   | 26,080                  | 30,659  | 17.6     | 0.38            | 0.36 | (6.4)    | 0.19        | 0.29 | 53.1     | 0.19    | 0.10 | (49.0)   | 0.15  | 0.23 | 48.9     | 0.92   | 0.98 | 6.3      |
| Central  | 49,748                  | 57,458  | 15.5     | 0.24            | 0.42 | 74.5     | 0.12        | 0.38 | 217.5    | 0.20    | 0.64 | 220.4    | 0.10  | 0.21 | 107.8    | 0.64   | 1.65 | 157.0    |
| Eastern  | 185,586                 | 222,142 | 19.7     | 0.29            | 0.41 | 42.3     | 0.09        | 0.22 | 135.9    | 0.10    | 0.26 | 155.0    | 0.20  | 0.39 | 89.1     | 0.69   | 1.28 | 85.4     |
| Western  | 104,465                 | 116,268 | 11.3     | 0.53            | 0.52 | (0.3)    | 0.23        | 0.18 | (21.4)   | 0.34    | 0.28 | (15.3)   | 0.09  | 0.10 | 19.8     | 1.18   | 1.09 | (7.2)    |
| Missouri   | 339,799                 | 395,868 | 16.5%    | 0.35            | 0.45 | 26.6%    | 0.14        | 0.23 | 62.7%    | 0.19    | 0.32 | 71.7%    | 0.15  | 0.28 | 81.6%    | 0.84   | 1.28 | 52.9%    |

**Table C19**

Source: Enrollment from, Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen; Complaint data from Missouri Department of Social Services, Division of Medical Services

Note: <sup>a</sup> Enrollment data is as of December 31 of the respective year. Enrollment totals include enrollees with a future start date. Enrollment totals do not include enrollees with a future stop date.

<sup>b</sup> 2000 was Care Partners last complete year of operation in the Central Region

Quality of Care includes: PCP Tx not helping, Not getting better, Lack of provider concern, Disagrees w/ Tx (not helping, feels treatment is for wrong symptoms), Diagnosis (concerned about, disagrees with, misdiagnosed), ER Problems (ER treatment, delays, unsanitary), Other; Appointment Problems include: Getting an appointment (can't be seen, PCP won't see for various reasons), Time to appointment (can't be seen as soon as feels necessary), Other; Denials include: Denied ER visit, Denied specialist referral, Denied/delayed prescriptions, Denied PCP/Dental visit, Denied treatment, Other; Other (Medical) include: Unable to reach PCP (phone not answered, PCP won't return calls, PCP unavailable), Change PCP (member dissatisfied with PCP, wants new one), Other; Transportation include: Ride was no show, Ride was late/early, Couldn't get transportation, Rude transportation personnel behavior, Ride not scheduled (request/authorization for transportation missing/lost), Other.

NR = Not reported.

| Member Non-Medical Complaints per 1,000 Members, CY2000-2001 |                |      |          |             |      |          |         |      |          |         |      |          |                |      |          |       |      |          |        |      |          |
|--|----------------|------|----------|-------------|------|----------|---------|------|----------|---------|------|----------|----------------|------|----------|-------|------|----------|--------|------|----------|
| Health Plan  | Transportation |      |          | Interpreter |      |          | Denials |      |          | Waiting |      |          | Staff Behavior |      |          | Other |      |          | TOTALS |      |          |
|  | 2000           | 2001 | % Change | 2000        | 2001 | % Change | 2000    | 2001 | % Change | 2000    | 2001 | % Change | 2000           | 2001 | % Change | 2000  | 2001 | % Change | 2000   | 2001 | % Change |
| HealthCare USA   | 0.00           | 0.88 | -        | 0.00        | 0.00 | -        | 0.12    | 0.03 | (71.9%)  | 0.08    | 0.03 | (57.8%)  | 0.24           | 0.20 | (15.7%)  | 1.56  | 1.11 | (28.7%)  | 2.00   | 2.26 | 13.0%    |
| Care Partners  | 0.00           | NR   | -        | 0.00        | NR   | -        | 0.00    | NR   | -        | 0.26    | NR   | -        | 0.00           | NR   | -        | 6.31  | NR   | -        | 6.58   | NR   | -        |
| Missouri Care  | 0.19           | 0.61 | 220.2    | 0.00        | 0.00 | -        | 0.00    | 0.07 | -        | 0.05    | 0.14 | 201.4    | 0.05           | 0.29 | 502.8    | 0.05  | 0.11 | 126.0    | 0.33   | 1.22 | 266.0    |
| Mercy Health Plan  | 0.05           | 1.43 | 2515.9   | 0.00        | 0.00 | -        | 0.27    | 0.82 | 201.2    | 0.05    | 0.09 | 58.5     | 0.05           | 0.35 | 534.1    | 0.11  | 0.04 | (60.4)   | 0.55   | 2.73 | 399.4    |
| Care Partners  | 0.79           | 2.55 | 221.3    | 0.00        | 0.02 | -        | 0.09    | 0.09 | 4.9      | 0.09    | 0.06 | (36.7)   | 0.18           | 0.15 | (16.1)   | 2.92  | 2.01 | (31.0)   | 4.64   | 4.88 | 5.2      |
| Community Care Plus  | 1.58           | 2.37 | 49.8     | 0.00        | 0.00 | -        | 0.27    | 0.18 | (35.0)   | 0.23    | 0.03 | (87.4)   | 0.19           | 0.47 | 142.7    | 0.39  | 0.73 | 89.6     | 2.67   | 3.78 | 41.8     |
| HealthCare USA   | 1.57           | 4.32 | 174.5    | 0.00        | 0.00 | -        | 0.16    | 0.20 | 19.1     | 0.06    | 0.07 | 15.5     | 0.14           | 0.19 | 29.9     | 0.45  | 1.01 | 122.4    | 2.40   | 5.78 | 141.2    |
| Family Health Partners                                       | 1.81           | 0.91 | (49.6)   | 0.00        | 0.00 | -        | 0.02    | 0.09 | 258.9    | 0.15    | 0.18 | 19.6     | 0.20           | 0.16 | (21.5)   | 0.22  | 0.56 | 149.2    | 2.41   | 1.89 | (21.4)   |
| HealthNet  | 0.96           | 3.02 | 214.9    | 0.00        | 0.07 | -        | 2.29    | 3.17 | 38.5     | 0.22    | 0.00 | (100.0)  | 0.00           | 0.22 | -        | 0.22  | 0.29 | 33.1     | 3.69   | 6.78 | 83.7     |
| Blue Advantage Plus  | 1.47           | 1.77 | 20.6     | 0.00        | 0.00 | -        | 0.49    | 0.55 | 13.1     | 0.45    | 0.07 | (83.6)   | 0.49           | 0.48 | (2.0)    | 0.24  | 0.30 | 20.6     | 3.14   | 3.17 | 1.0      |
| FirstGuard Health Plan                                       | 0.12           | 0.78 | 580.5    | 0.00        | 0.00 | -        | 0.88    | 1.04 | 18.4     | 0.00    | 0.07 | -        | 0.31           | 0.20 | (36.2)   | 0.19  | 0.62 | 223.2    | 1.50   | 2.71 | 81.0     |
| Central  | 0.08           | 0.75 | 830.8    | 0.00        | 0.00 | -        | 0.06    | 0.05 | (13.4)   | 0.06    | 0.09 | 44.3     | 0.14           | 0.24 | 73.2     | 0.80  | 0.63 | (22.1)   | 1.15   | 1.76 | 53.4     |
| Eastern  | 1.24           | 3.30 | 166.3    | 0.00        | 0.00 | -        | 0.17    | 0.23 | 35.8     | 0.10    | 0.06 | (35.0)   | 0.15           | 0.24 | 58.1     | 1.13  | 1.10 | (2.1)    | 2.79   | 4.94 | 77.4     |
| Western  | 1.20           | 1.32 | 10.7     | 0.00        | 0.01 | -        | 0.64    | 0.81 | 26.1     | 0.19    | 0.10 | (46.1)   | 0.27           | 0.25 | (6.9)    | 0.22  | 0.48 | 118.8    | 2.52   | 2.98 | 18.2     |
| Missouri   | 1.06           | 2.35 | 122.4%   | 0.00        | 0.01 | -        | 0.30    | 0.38 | 25.4%    | 0.12    | 0.08 | (36.6%)  | 0.19           | 0.24 | 30.8%    | 0.87  | 0.85 | (2.3%)   | 2.54   | 3.90 | 53.8%    |

**Table C20**

Source: Enrollment from Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen; Complaint data from Missouri Department of Social Services, Division of Medical Services

Note: Interpreter complaints: No subcategories; Denial of Claims include: Claim for treatment denied, Claim for ER visit denied, Other; Waiting includes: Waiting for PCP (excessive time spent in office waiting to be seen), Wait/delay in getting appointment, Other; Staff Behavior includes: PCP attitude/behavior (rude, indifferent, harassing, abusive, rough), Office personnel behavior (rude, abusive), ER personnel behavior (rude, abusive, lack of concern/urgency), other; Other (Non-Medical) include: Member charged at time service is rendered, Receiving bills (bills from PCP, collection agencies, etc.), PCP not available (doctor/dentist cannot be reached or won't see member), ER area/PCP office not clean, Other.

NR = Not reported.

CAHPS Survey Ratings, 2001

|         | Health Plan            | Rating of Personal Doctor |       |       | Rating of Specialist |       |       | Rating of All Health Care |       |       | Rating of Health Plan |       |       |
|---------|------------------------|---------------------------|-------|-------|----------------------|-------|-------|---------------------------|-------|-------|-----------------------|-------|-------|
|         |                        | 0-6                       | 7-8   | 9-10  | 0-6                  | 7-8   | 9-10  | 0-6                       | 7-8   | 9-10  | 0-6                   | 7-8   | 9-10  |
| Central | HealthCare USA         | 15.9%                     | 24.1% | 60.1% | 18.6%                | 23.3% | 58.1% | 15.4%                     | 27.4% | 57.2% | 18.1%                 | 27.8% | 54.1% |
|         | Care Partners          | 15.8                      | 26.3  | 57.9  | 20.0                 | 40.0  | 40.0  | 33.3                      | 16.7  | 50.0  | 33.3                  | 22.2  | 44.4  |
|         | Missouri Care          | 10.6                      | 20.7  | 68.8  | 16.7                 | 24.2  | 59.1  | 19.1                      | 29.1  | 51.8  | 19.8                  | 28.9  | 51.4  |
| Eastern | Mercy Health Plan      | 18.7                      | 28.3  | 53.0  | 22.0                 | 27.5  | 50.5  | 19.3                      | 32.5  | 48.1  | 22.6                  | 25.9  | 51.5  |
|         | Care Partners          | 17.0                      | 32.1  | 50.9  | 13.3                 | 38.7  | 48.0  | 20.6                      | 28.5  | 50.9  | 19.1                  | 26.8  | 54.2  |
|         | Community Care Plus    | 16.2                      | 30.5  | 53.2  | 12.5                 | 26.8  | 60.7  | 18.3                      | 33.1  | 48.6  | 18.6                  | 31.9  | 49.6  |
| Western | HealthCare USA         | 13.6                      | 29.1  | 57.3  | 30.5                 | 22.0  | 47.5  | 18.4                      | 29.1  | 52.6  | 18.4                  | 25.4  | 56.2  |
|         | Family Health Partners | 20.6                      | 20.6  | 58.8  | 22.2                 | 18.5  | 59.3  | 20.0                      | 29.7  | 50.3  | 23.2                  | 28.1  | 48.7  |
|         | HealthNet              | 21.4                      | 33.9  | 44.6  | 22.7                 | 22.7  | 54.5  | 31.1                      | 16.4  | 52.5  | 24.3                  | 32.4  | 43.2  |
|         | Blue Advantage Plus    | 19.9                      | 27.6  | 52.6  | 34.0                 | 15.1  | 50.9  | 17.6                      | 28.4  | 54.1  | 19.7                  | 30.1  | 50.3  |
|         | FirstGuard Health Plan | 20.0                      | 21.2  | 58.8  | 27.6                 | 20.7  | 51.7  | 26.4                      | 16.1  | 57.5  | 28.1                  | 26.7  | 45.2  |
|         | <b>Central</b>         | 14.4                      | 23.2  | 62.5  | 18.0                 | 24.4  | 57.6  | 17.0                      | 27.6  | 55.4  | 19.1                  | 27.9  | 53.0  |
|         | <b>Eastern</b>         | 16.5                      | 30.0  | 53.6  | 19.6                 | 29.2  | 51.2  | 19.2                      | 30.7  | 50.1  | 19.7                  | 27.2  | 53.0  |
|         | <b>Western</b>         | 20.3                      | 24.6  | 55.0  | 27.2                 | 18.4  | 54.4  | 21.8                      | 25.2  | 53.0  | 23.3                  | 28.9  | 47.8  |
|         | <b>Missouri</b>        | 16.6                      | 26.2  | 57.2  | 21.0                 | 25.0  | 54.0  | 19.1                      | 28.3  | 52.6  | 20.4                  | 27.9  | 51.7  |
|         | <b>1999 NCBD</b>       | 19.0%                     | 25.0% | 56.0% | 16.0%                | 23.0% | 61.0% | 12.0%                     | 25.0% | 63.0% | 18.0%                 | 27.0% | 56.0% |

**Table C21**

Source: Missouri Division of Medical Services, Department of Social Services, 2001 Consumer Assessment of Health Plans Survey

NCBD = National CAHPS Benchmarking Database; Agency for HealthCare Quality and Research, Annual Report of the National CAHPS Benchmarking Database, 2000: What Consumers Say about the Quality of their Health Plans and Medical Care

Note: The ratings are based on a scale of 0-10 where 0 is the "worst possible" and 10 is the "best possible".

| Provider Complaints, per 1,000 Members, 2001 |                    |                             |                       |                        |       |        |                                 |                     |             |       |              |        |
|--|--------------------|-----------------------------|-----------------------|------------------------|-------|--------|---------------------------------|---------------------|-------------|-------|--------------|--------|
| Health Plan                                  | Enrollment<br>2001 | Provider Medical Complaints |                       |                        |       |        | Provider Non-Medical Complaints |                     |             |       |              |        |
|  |                    | Quality of<br>Care          | Denial of<br>Services | Denial of<br>Referrals | Other | TOTALS | Transport.                      | Denial of<br>Claims | Interpreter | Other | Billing & PA | TOTALS |
| HealthCare USA                               | 29,637             | 0.27                        | 1.18                  | 0.00                   | 0.07  | 1.52   | 0.00                            | 28.41               | 0.00        | 0.94  | 2.16         | 31.51  |
| Missouri Care                                | 27,821             | 0.00                        | 0.00                  | 0.00                   | 0.00  | 0.00   | 0.00                            | 0.11                | 0.00        | 0.00  | 1.15         | 1.26   |
| Mercy Health Plan                            | 23,105             | 0.00                        | 0.00                  | 0.00                   | 0.00  | 0.00   | 0.00                            | 6.32                | 0.00        | 0.00  | 2.68         | 9.00   |
| Care Partners                                | 52,640             | 0.00                        | 0.00                  | 0.00                   | 0.00  | 0.00   | 0.08                            | 0.00                | 0.00        | 0.19  | 0.00         | 0.27   |
| Community Care Plus                          | 34,129             | 0.06                        | 0.00                  | 0.00                   | 0.00  | 0.06   | 0.00                            | 0.06                | 0.00        | 0.06  | 0.00         | 0.12   |
| HealthCare USA                               | 112,268            | 0.04                        | 0.52                  | 0.01                   | 0.00  | 0.56   | 0.03                            | 24.83               | 0.00        | 0.35  | 2.62         | 27.83  |
| Family Health Partners                       | 44,931             | 0.00                        | 0.00                  | 0.02                   | 0.02  | 0.04   | 0.02                            | 0.11                | 0.00        | 0.04  | 0.27         | 0.45   |
| HealthNet                                    | 13,570             | 0.00                        | 0.15                  | 0.00                   | 0.00  | 0.15   | 0.00                            | 6.78                | 0.00        | 0.15  | 0.22         | 7.15   |
| Blue Advantage Plus                          | 27,108             | 0.15                        | 0.07                  | 0.00                   | 0.11  | 0.33   | 0.00                            | 3.06                | 0.00        | 0.00  | 1.51         | 4.57   |
| FirstGuard                                   | 30,659             | 0.00                        | 0.16                  | 0.00                   | 0.03  | 0.20   | 0.00                            | 0.33                | 0.00        | 0.13  | 0.03         | 0.49   |
| <b>Central</b>                               | 57,458             | 0.14                        | 0.61                  | 0.00                   | 0.03  | 0.78   | 0.00                            | 14.71               | 0.00        | 0.49  | 1.67         | 16.86  |
| <b>Eastern</b>                               | 222,142            | 0.03                        | 0.26                  | 0.00                   | 0.00  | 0.29   | 0.03                            | 13.22               | 0.00        | 0.23  | 1.60         | 15.08  |
| <b>Western</b>                               | 116,268            | 0.02                        | 0.04                  | 0.00                   | 0.02  | 0.09   | 0.01                            | 1.63                | 0.00        | 0.07  | 0.49         | 2.20   |
| Missouri                                     | 395,868            | 0.05                        | 0.26                  | 0.01                   | 0.02  | 0.33   | 0.02                            | 10.03               | 0.00        | 0.22  | 1.29         | 11.56  |

**Table C22**

Source: Complaint data from Missouri Department of Social Services, Division of Medical Services

Note: Quality of Care includes: Member non-compliant (not following Tx plan, not allowing immunizations), Member missing appointments (provider concerned member not getting needed Tx), Other; Denial of Referrals includes: Obtaining referrals (trouble getting), Referral non-compliance, Other; Denial of Services includes: Pharmacy authorization (can't get member verification), ER denial, Treatment denial, Other; Other (Medical) includes: Specialist accessibility, Member using ER, Member eligibility (not on eligibility list), Reaching member (unable to locate mom/member for f/u on Tx), Other; Transportation includes: Member missed appointment (transportation provider failed to pick up member), Member arrival time (too early/late for appointment due to transportation), other; Interpreter issues: No subtopics; Denial of claims: No authorization (treatment not approved in advance), Benefit not covered, Non-par payment, Inpatient stay (hospitalization not authorized, deemed unnecessary), other; Other (Non-Medical): Member behavior (rude, abusive, profane), Wants member disenrolled, Member missed appointment(s) (provider upset, member constantly a no-show), Member altered Rx (normally narcotic Rx), other.

PA = Prior Authorization.

**Number MC+ Members by Health Plan, Region, and State, 1998 - 2001**

|         | Health Plan <sup>d</sup> | Encounter Claims per 1,000 MC+ Members |                   |                   |                     | % Change<br>2000 - 2001 |
|---------|--------------------------|--|-------------------|-------------------|---------------------|-------------------------|
|         |                          | 1998 <sup>a</sup>                      | 1999 <sup>a</sup> | 2000 <sup>a</sup> | 2001 <sup>b,c</sup> |                         |
| Central | HealthCare USA           | 18,637                                 | 22,281            | 23,503            | 33,150              | 41.0%                   |
|         | Care Partners            | 2,408                                  | 3,129             | 3,465             | 4,134               | 19.3                    |
|         | Missouri Care            | 9,678                                  | 15,261            | 18,311            | 29,059              | 58.7                    |
| Eastern | Prudential               | 13,684                                 | 11,974            | NA                | NA                  | -                       |
|         | Mercy Health Plan        | 9,740                                  | 13,124            | 15,643            | 25,213              | 61.2                    |
|         | Care Partners            | 30,293                                 | 39,123            | 39,126            | 55,512              | 41.9                    |
|         | Community Care Plus      | 19,247                                 | 19,976            | 21,789            | 36,118              | 65.8                    |
| Western | HealthCare USA           | 59,105                                 | 71,201            | 90,212            | 116,782             | 29.5                    |
|         | Family Health Partners   | 28,174                                 | 35,106            | 37,645            | 48,849              | 29.8                    |
|         | HealthNet                | 9,691                                  | 10,179            | 12,679            | 16,941              | 33.6                    |
|         | Blue Advantage Plus      | 15,291                                 | 19,574            | 22,880            | 30,103              | 31.6                    |
|         | FirstGuard Health Plan   | 18,618                                 | 22,163            | 24,023            | 32,176              | 33.9                    |
|         | Central                  | 30,723                                 | 40,671            | 45,279            | 66,343              | 46.5                    |
|         | Eastern                  | 132,069                                | 155,398           | 166,770           | 233,625             | 40.1                    |
|         | Western                  | 71,774                                 | 87,022            | 97,227            | 128,069             | 31.7                    |
|         | Missouri                 | 234,566                                | 283,091           | 309,276           | 428,037             | 38.4%                   |

**Table C23**

Sources: <sup>a</sup> Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

<sup>b</sup> Missouri Department of Social Services, Eligibility and Enrollment Data, February 2002

Note: <sup>c</sup> The Missouri Department of Social Services, Division of Medical Services, State Session MPRI Screen reported a total of 396,003 members as of December 31, 2001. Reasons for the variance may include differences in timeframes, database elements, and data definitions. Five counties were added to the program during CY2001.

<sup>d</sup> Prudential (Eastern Region), Community Health Partners (Western Region) and Blue Advantage Plus (Northwestern Region) were not providing services in 2001. A small number of claims (N=438) were still attributed to these plans in the database, but were not considered in the analyses.

NA = Not Applicable.

**Encounter Claims by Plan, Region, and State, 1998 - 2001**

|         | Health Plan            | Encounter Claims per 1,000 MC+ Members |          |                   |          |                   |          |
|---------|------------------------|--|----------|-------------------|----------|-------------------|----------|
|         |                        | 1998 <sup>a</sup>                      |          | 1999 <sup>a</sup> |          | 2000 <sup>a</sup> |          |
|         |                        | N                                      | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 |
| Central | HealthCare USA         | 255,332                                | 13,700   | 320,610           | 14,389   | 366,759           | 15,605   |
|         | Care Partners          | 6,226                                  | 2,586    | 26,767            | 8,554    | 44,826            | 12,937   |
|         | Missouri Care          | 32,064                                 | 3,313    | 220,759           | 14,466   | 315,376           | 17,223   |
| Eastern | Prudential             | 105,596                                | 7,717    | 103,574           | 8,650    | NA                | -        |
|         | Mercy Health Plan      | 122,233                                | 12,550   | 133,161           | 10,146   | 163,756           | 10,468   |
|         | Care Partners          | 217,032                                | 7,164    | 369,099           | 9,434    | 510,915           | 13,058   |
|         | Community Care Plus    | 161,676                                | 8,400    | 77,775            | 3,893    | 118,089           | 5,420    |
| Western | HealthCare USA         | 612,959                                | 10,371   | 574,333           | 8,066    | 1,164,364         | 12,907   |
|         | Family Health Partners | 356,603                                | 12,657   | 393,037           | 11,196   | 632,052           | 16,790   |
|         | HealthNet              | 87,562                                 | 9,035    | 83,822            | 8,235    | 177,981           | 14,037   |
|         | Blue Advantage Plus    | 178,506                                | 11,674   | 194,291           | 9,926    | 409,596           | 17,902   |
|         | FirstGuard Health Plan | 265,083                                | 14,238   | 261,567           | 11,802   | 330,699           | 13,766   |
|         | Central                | 293,622                                | 9,557    | 568,136           | 13,969   | 726,961           | 16,055   |
|         | Eastern                | 1,219,496                              | 9,234    | 1,257,942         | 8,095    | 1,957,124         | 11,735   |
|         | Western                | 887,754                                | 12,369   | 932,717           | 10,718   | 1,550,328         | 15,945   |
|         | Missouri               | 2,400,872                              | 10,235   | 2,758,795         | 9,745    | 4,234,413         | 13,691   |

**Table C24**

Sources: <sup>a</sup> Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

<sup>b</sup> Missouri Department of Social Services, Enrollment and Encounter Databases provided to BHC, Inc., March 2002

Note: CY2001 encounters are based on paid/adjudicated claims with CY2001 Service Dates

Prudential (Eastern Region), Family Health Partners (Western Region) and Blue Advantage Plus (Northwestern Region) were not providing services in 2001. A small number of claims (N=438) attributed to these plans in the database were not included in the analyses.

NA = Not Applicable.

**Medical Encounter Claims by Plan, Region, and State, 1998 - 2001**

| <b>Medical Claims per 1,000 Members</b> |                         |                  |                         |                  |                         |                  |                         |                  |
|---|-------------------------|------------------|-------------------------|------------------|-------------------------|------------------|-------------------------|------------------|
| <b>Health Plan</b>                      | <b>1998<sup>a</sup></b> |                  | <b>1999<sup>a</sup></b> |                  | <b>2000<sup>a</sup></b> |                  | <b>2001<sup>b</sup></b> |                  |
|   | <b>N</b>                | <b>N / 1,000</b> | <b>N</b>                | <b>N / 1,000</b> | <b>N</b>                | <b>N / 1,000</b> | <b>N</b>                | <b>N / 1,000</b> |
| <b>Central</b>                          |                         |                  |                         |                  |                         |                  |                         |                  |
| HealthCare USA                          | 114,843                 | 6,162            | 97,270                  | 4,366            | 219,289                 | 9,330            | 307,333                 | 9,271            |
| Care Partners                           | 2,777                   | 1,153            | 8,752                   | 2,797            | 8,806                   | 2,541            | 34,147                  | 8,260            |
| Missouri Care                           | 32,064                  | 3,313            | 69,781                  | 4,573            | 150,732                 | 8,232            | 147,256                 | 5,067            |
| Prudential                              | 42,281                  | 3,090            | 40,714                  | 3,400            | NA                      | -                | NA                      | -                |
| <b>Eastern</b>                          |                         |                  |                         |                  |                         |                  |                         |                  |
| Mercy Health Plan                       | 41,757                  | 4,287            | 48,399                  | 3,688            | 72,532                  | 4,637            | 135,533                 | 5,376            |
| Care Partners                           | 65,597                  | 2,165            | 117,358                 | 3,000            | 198,489                 | 5,073            | 297,573                 | 5,361            |
| Community Care Plus                     | 50,204                  | 2,608            | 49,890                  | 2,497            | 58,738                  | 2,696            | 180,101                 | 4,986            |
| <b>Western</b>                          |                         |                  |                         |                  |                         |                  |                         |                  |
| HealthCare USA                          | 235,673                 | 3,987            | 168,279                 | 2,363            | 666,520                 | 7,388            | 695,277                 | 5,954            |
| Family Health Partners                  | 135,212                 | 4,799            | 138,238                 | 3,938            | 247,689                 | 6,580            | 347,344                 | 7,111            |
| HealthNet                               | 43,685                  | 4,508            | 21,470                  | 2,109            | 82,635                  | 6,517            | 109,558                 | 6,467            |
| Blue Advantage Plus                     | 80,452                  | 5,261            | 94,926                  | 4,850            | 236,146                 | 10,321           | 219,953                 | 7,307            |
| FirstGuard Health Plan                  | 94,471                  | 5,074            | 112,413                 | 5,072            | 153,602                 | 6,394            | 233,716                 | 7,264            |
| <b>Central</b>                          | 149,684                 | 4,872            | 175,803                 | 4,323            | 378,827                 | 8,367            | 488,736                 | 7,367            |
| <b>Eastern</b>                          | 435,512                 | 3,298            | 424,640                 | 2,733            | 996,279                 | 5,974            | 1,308,484               | 5,601            |
| <b>Western</b>                          | 353,820                 | 4,930            | 367,047                 | 4,218            | 720,072                 | 7,406            | 910,571                 | 7,110            |
| <b>Missouri</b>                         | <b>939,016</b>          | <b>4,003</b>     | <b>967,490</b>          | <b>3,418</b>     | <b>2,095,178</b>        | <b>6,774</b>     | <b>2,707,791</b>        | <b>6,326</b>     |

**Table C25**

Sources: <sup>a</sup> Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

<sup>b</sup> Missouri Department of Social Services, Enrollment and Encounter Databases provided to BHC, Inc. March 2002

Note: CY2001 encounters are based on paid/adjudicated claims with CY2001 Service Dates.

Prudential (Eastern Region), Community Health Partners (Western Region) and Blue Advantage Plus (Northwestern Region) were not providing services in 2001. A small number of claims attributed to these plans in the database were not included in the analyses.

NA = Not Applicable.

**Outpatient Encounter Claims by Plan, Region, and State, 1998 - 2001**

| <b>Outpatient Claims per 1,000 Members</b> |                         |                  |                         |                  |                         |                  |                         |                  |
|--|-------------------------|------------------|-------------------------|------------------|-------------------------|------------------|-------------------------|------------------|
| <b>Health Plan</b>                         | <b>1998<sup>a</sup></b> |                  | <b>1999<sup>a</sup></b> |                  | <b>2000<sup>a</sup></b> |                  | <b>2001<sup>b</sup></b> |                  |
|  | <b>N</b>                | <b>N / 1,000</b> | <b>N</b>                | <b>N / 1,000</b> | <b>N<sup>c</sup></b>    | <b>N / 1,000</b> | <b>N</b>                | <b>N / 1,000</b> |
| <b>Central</b>                             |                         |                  |                         |                  |                         |                  |                         |                  |
| HealthCare USA                             | 18,981                  | 1,018            | 25,321                  | 1,136            | 325                     | 14               | 114,017                 | 3,439            |
| Care Partners                              | 267                     | 111              | 2,419                   | 773              | 17,629                  | 5,088            | 7,389                   | 1,787            |
| Missouri Care                              | 0                       | -                | 27,573                  | 1,807            | 49,470                  | 2,702            | 35,370                  | 1,217            |
| Prudential                                 | 11,219                  | 820              | 13,348                  | 1,115            | NA                      | -                | NA                      | -                |
| <b>Eastern</b>                             |                         |                  |                         |                  |                         |                  |                         |                  |
| Mercy Health Plan                          | 12,531                  | 1,287            | 14,483                  | 1,104            | 25,438                  | 1,626            | 55,134                  | 2,187            |
| Care Partners                              | 28,995                  | 957              | 44,964                  | 1,149            | 80,699                  | 2,063            | 113,217                 | 2,040            |
| Community Care Plus                        | 9,148                   | 475              | 21,602                  | 1,081            | 23,902                  | 1,097            | 57,392                  | 1,589            |
| <b>Western</b>                             |                         |                  |                         |                  |                         |                  |                         |                  |
| HealthCare USA                             | 64,582                  | 1,093            | 66,063                  | 928              | 8,965                   | 99               | 47,484                  | 407              |
| Family Health Partners                     | 74,949                  | 2,660            | 77,960                  | 2,221            | 141,284                 | 3,753            | 223,042                 | 4,566            |
| HealthNet                                  | 3,085                   | 318              | 7,168                   | 704              | 22,663                  | 1,787            | 50,270                  | 2,967            |
| Blue Advantage Plus                        | 14,660                  | 959              | 33,472                  | 1,710            | 56,908                  | 2,487            | 108,146                 | 3,593            |
| FirstGuard Health Plan                     | 20,237                  | 1,087            | 26,028                  | 1,174            | 46,133                  | 1,920            | 111,170                 | 3,455            |
| <b>Central</b>                             | 19,248                  | 627              | 55,313                  | 1,360            | 67,424                  | 1,489            | 156,776                 | 2,363            |
| <b>Eastern</b>                             | 126,475                 | 958              | 160,460                 | 1,033            | 139,004                 | 834              | 273,227                 | 1,170            |
| <b>Western</b>                             | 112,931                 | 1,573            | 144,628                 | 1,662            | 266,988                 | 2,746            | 492,628                 | 3,847            |
| <b>Missouri</b>                            | <b>258,654</b>          | <b>1,103</b>     | <b>360,401</b>          | <b>1,273</b>     | <b>473,416</b>          | <b>1,531</b>     | <b>922,631</b>          | <b>2,155</b>     |

**Table C26**

Sources: <sup>a</sup> Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

<sup>b</sup> Missouri Department of Social Services, Enrollment and Encounter Databases provided to BHC, Inc. March 2002

Note: CY2001 encounters are based on paid/adjudicated claims with CY2001 Service Dates.

Prudential (Eastern Region), Community Health Partners (Western Region) and Blue Advantage Plus (Northwestern Region) were not providing services in 2001. A small number of claims attributed to these plans in the database were not included in the analyses.

NA = Not Applicable.



**Home Health Encounter Claims by Plan, Region, and State, 1998 - 2001**

| Home Health Claims per 1,000 Members |                        |                   |          |                   |          |                   |          |                   |          |
|--------------------------------------|------------------------|-------------------|----------|-------------------|----------|-------------------|----------|-------------------|----------|
|                                      |                        | 1998 <sup>a</sup> |          | 1999 <sup>a</sup> |          | 2000 <sup>a</sup> |          | 2001 <sup>b</sup> |          |
| Health Plan                          |                        | N                 | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 |
| Central                              | HealthCare USA         | 0                 | -        | 0                 | -        | 0                 | -        | 521               | 16       |
|                                      | Care Partners          | 0                 | -        | 0                 | -        | 0                 | -        | 118               | 29       |
|                                      | Missouri Care          | 0                 | -        | 0                 | -        | 0                 | -        | 303               | 10       |
| Eastern                              | Prudential             | NA                | -        | NA                | -        | NA                | -        | NA                | -        |
|                                      | Mercy Health Plan      | 0                 | -        | 0                 | -        | 0                 | -        | 337               | 13       |
|                                      | Care Partners          | 0                 | -        | 0                 | -        | 0                 | -        | 1,772             | 32       |
|                                      | Community Care Plus    | 0                 | -        | 0                 | -        | 0                 | -        | 314               | 9        |
| Western                              | HealthCare USA         | 0                 | -        | 0                 | -        | 0                 | -        | 1,903             | 16       |
|                                      | Family Health Partners | 0                 | -        | 0                 | -        | 734               | -        | 794               | 16       |
|                                      | HealthNet              | 0                 | -        | 0                 | -        | 0                 | -        | 315               | 19       |
|                                      | Blue Advantage Plus    | 806               | 52       | 485               | 25       | 13                | 1        | 233               | 8        |
|                                      | FirstGuard Health Plan | 699               | 37       | 677               | 31       | 425               | 18       | 1,148             | 36       |
| Central                              |                        | 0                 | -        | 0                 | -        | 0                 | -        | 942               | 14       |
| Eastern                              |                        | 0                 | -        | 0                 | -        | 0                 | -        | 4,326             | 19       |
| Western                              |                        | 1,505             | -        | 1,162             | -        | 1,172             | -        | 2,490             | 19       |
| Missouri                             |                        | 1,505             | -        | 1,162             | -        | 1,172             | -        | 7,758             | 18       |

**Table C27**

Sources: <sup>a</sup> Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

<sup>b</sup> Missouri Department of Social Services, Enrollment and Encounter Databases provided to BHC, Inc. March 2002

Note: CY2001 encounters are based on paid/adjudicated claims with CY2001 Service Dates.

Prudential (Eastern Region), Community Health Partners (Western Region) and Blue Advantage Plus (Northwestern Region) were not providing services in 2001. A small number of claims attributed to these plans in the database were not included in the analyses. NA = Not Applicable.

**Inpatient Encounter Claims by Plan, Region, and State, 1998 - 2001**

| Inpatient Claims per 1,000 Members |                        |          |                   |          |                   |          |                   |          |    |
|------------------------------------|------------------------|----------|-------------------|----------|-------------------|----------|-------------------|----------|----|
|                                    | 1998 <sup>a</sup>      |          | 1999 <sup>a</sup> |          | 2000 <sup>a</sup> |          | 2001 <sup>b</sup> |          |    |
| Health Plan                        | N                      | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 |    |
| Central                            | HealthCare USA         | 2,263    | 121               | 2,273    | 102               | 4,859    | 207               | 2,214    | 67 |
|                                    | Care Partners          | 48       | 20                | 253      | 81                | 495      | 143               | 282      | 68 |
|                                    | Missouri Care          | 0        | -                 | 1,902    | 125               | 4,381    | 239               | 1,219    | 42 |
|                                    | Prudential             | 842      | 62                | 2,582    | 216               | NA       | -                 | NA       | -  |
| Eastern                            | Mercy Health Plan      | 1,379    | 142               | 1,011    | 77                | 2,380    | 152               | 1,413    | 56 |
|                                    | Care Partners          | 3,162    | 104               | 3,370    | 86                | 5,921    | 151               | 3,746    | 67 |
|                                    | Community Care Plus    | 879      | 46                | 3,044    | 152               | 1,538    | 71                | 2,225    | 62 |
|                                    | HealthCare USA         | 5,458    | 92                | 7,939    | 112               | 21,818   | 242               | 7,186    | 62 |
| Western                            | Family Health Partners | 3,475    | 123               | 4,154    | 118               | 8,882    | 236               | 4,630    | 95 |
|                                    | HealthNet              | 1,237    | 128               | 523      | 51                | 2,197    | 173               | 1,552    | 92 |
|                                    | Blue Advantage Plus    | 2,869    | 188               | 3,087    | 158               | 5,695    | 249               | 2,891    | 96 |
|                                    | FirstGuard Health Plan | 2,245    | 121               | 2,708    | 122               | 4,948    | 206               | 2,615    | 81 |
|                                    | Central                | 2,311    | 75                | 4,428    | 109               | 9,735    | 215               | 3,715    | 56 |
| Eastern                            | 11,720                 | 89       | 17,946            | 125      | 31,657            | 190      | 14,570            | 62       |    |
| Western                            | 9,826                  | 137      | 10,472            | 120      | 21,722            | 223      | 11,688            | 91       |    |
| Missouri                           | 23,857                 | 102      | 32,846            | 121      | 63,114            | 204      | 29,973            | 70       |    |

**Table C28**

Sources: <sup>a</sup> Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

<sup>b</sup> Missouri Department of Social Services, Enrollment and Encounter Databases provided to BHC, Inc. March 2002

Note: CY2001 encounters are based on paid/adjudicated claims with CY2001 Service Dates.

Prudential (Eastern Region), Community Health Partners (Western Region) and Blue Advantage Plus (Northwestern Region) were not providing services in 2001. A small number of claims attributed to these plans in the database were not included in the analyses.

CY2001 encounters are based on claim type "I" provided in the DSS database. The query returned a total of 244,855 encounter claims which included a variety of revenue codes including pharmacy, radiology and other specific services. Limiting the query to specific patient account numbers (as a substitute for Individual Claim Numbers) the query resulted in 29,973 encounter claims.

NA = Not Applicable.

**Pharmacy Encounter Claims by Plan, Region, and State, 1998 - 2001**

| Pharmacy Claims per 1,000 Members |                   |          |                   |          |                   |          |                   |          |
|-----------------------------------|-------------------|----------|-------------------|----------|-------------------|----------|-------------------|----------|
| Health Plan                       | 1998 <sup>a</sup> |          | 1999 <sup>a</sup> |          | 2000 <sup>a</sup> |          | 2001 <sup>b</sup> |          |
|                                   | N                 | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 |
| Central                           |                   |          |                   |          |                   |          |                   |          |
| HealthCare USA                    | 113,727           | 6,102    | 188,743           | 8,471    | 135,283           | 5,756    | 212,819           | 6,420    |
| Care Partners                     | 3,134             | 1,301    | 15,045            | 4,808    | 17,002            | 4,907    | 22,820            | 5,520    |
| Missouri Care                     | 0                 | -        | 121,503           | 7,962    | 101,987           | 5,570    | 99,688            | 3,431    |
| Prudential                        | 47,516            | 3,472    | 43,769            | 3,655    | NA                | -        | NA                | -        |
| Eastern                           |                   |          |                   |          |                   |          |                   |          |
| Mercy Health Plan                 | 57,615            | 5,915    | 61,335            | 4,673    | 55,756            | 3,564    | 128,465           | 5,095    |
| Care Partners                     | 108,171           | 3,571    | 192,552           | 4,922    | 203,928           | 5,212    | 183,836           | 3,312    |
| Community Care Plus               | 97,933            | 5,088    | 2,526             | 126      | 19,243            | 883      | 98,548            | 2,729    |
| HealthCare USA                    | 282,215           | 4,775    | 298,421           | 4,191    | 414,852           | 4,599    | 538,149           | 4,608    |
| Western                           |                   |          |                   |          |                   |          |                   |          |
| Family Health Partners            | 129,845           | 4,609    | 157,761           | 4,494    | 205,607           | 5,462    | 205,925           | 4,216    |
| HealthNet                         | 37,613            | 3,881    | 51,353            | 5,045    | 61,754            | 4,871    | 80,133            | 4,730    |
| Blue Advantage Plus               | 75,350            | 4,928    | 57,165            | 2,920    | 95,704            | 4,183    | 114,524           | 3,804    |
| FirstGuard Health Plan            | 141,142           | 7,581    | 112,738           | 5,087    | 107,398           | 4,471    | 143,237           | 4,452    |
| Central                           | 116,861           | 3,804    | 325,291           | 7,998    | 254,272           | 5,616    | 335,327           | 5,054    |
| Eastern                           | 593,450           | 5,013    | 598,603           | 4,174    | 693,779           | 4,160    | 948,998           | 4,062    |
| Western                           | 383,950           | 7,223    | 379,017           | 4,355    | 470,463           | 4,839    | 543,819           | 4,246    |
| Missouri                          | 1,094,261         | 5,410    | 1,302,911         | 4,806    | 1,418,514         | 4,587    | 1,828,144         | 4,271    |

**Table C29**

Sources: <sup>a</sup> Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

<sup>b</sup> Missouri Department of Social Services, Enrollment and Encounter Databases provided to BHC, Inc. March 2002

Note: CY2001 encounters are based on paid/adjudicated claims with CY2001 Service Dates.

Prudential (Eastern Region), Community Health Partners (Western Region) and Blue Advantage Plus (Northwestern Region) were not providing services in 2001. A small number of claims attributed to these plans in the database were not included in the analyses.

**Dental Encounter Claims by Plan, Region, and State, 1998 - 2001**

| Dental Claims per 1,000 Members |                   |          |                   |          |                   |          |                   |          |
|---------------------------------|-------------------|----------|-------------------|----------|-------------------|----------|-------------------|----------|
| Health Plan                     | 1998 <sup>a</sup> |          | 1999 <sup>a</sup> |          | 2000 <sup>a</sup> |          | 2001 <sup>b</sup> |          |
|                                 | N                 | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 | N                 | N/ 1,000 |
| Central                         |                   |          |                   |          |                   |          |                   |          |
| HealthCare USA                  | 5,518             | 296      | 7,003             | 314      | 7,003             | 298      | 16,978            | 512      |
| Care Partners                   | 0                 | -        | 298               | 95       | 894               | 258      | 2,186             | 529      |
| Missouri Care                   | 0                 | -        | 0                 | -        | 8,806             | 481      | 8,233             | 283      |
| Prudential                      | 3,738             | 273      | 3,161             | 264      | NA                | -        | NA                | -        |
| Eastern                         |                   |          |                   |          |                   |          |                   |          |
| Mercy Health Plan               | 8,951             | 919      | 7,933             | 604      | 7,650             | 489      | 12,840            | 509      |
| Care Partners                   | 11,107            | 367      | 10,855            | 277      | 21,878            | 559      | 32,956            | 594      |
| Community Care Plus             | 3,512             | 182      | 713               | 36       | 14,668            | 673      | 21,195            | 587      |
| HealthCare USA                  | 25,031            | 424      | 33,631            | 472      | 52,209            | 579      | 65,193            | 558      |
| Western                         |                   |          |                   |          |                   |          |                   |          |
| Family Health Partners          | 13,122            | 466      | 14,924            | 425      | 27,856            | 740      | 36,146            | 740      |
| HealthNet                       | 1,942             | 200      | 3,308             | 325      | 8,732             | 689      | 10,236            | 604      |
| Blue Advantage Plus             | 4,369             | 286      | 5,156             | 263      | 15,130            | 661      | 17,757            | 590      |
| FirstGuard Health Plan          | 6,289             | 338      | 7,003             | 316      | 18,193            | 757      | 18,733            | 582      |
| Central                         | 5,518             | 180      | 7,301             | 180      | 16,703            | 369      | 27,397            | 413      |
| Eastern                         | 52,339            | 442      | 56,293            | 392      | 96,405            | 578      | 132,184           | 566      |
| Western                         | 25,722            | 484      | 30,391            | 349      | 69,911            | 719      | 82,872            | 647      |
| Missouri                        | 83,579            | 413      | 93,985            | 347      | 183,019           | 592      | 242,453           | 566      |

**Table C30**

Sources: <sup>a</sup> Missouri Patient Care Review Foundation, 1998, 1999 and 2000 EQRO Reports

<sup>b</sup> Missouri Department of Social Services, Enrollment and Encounter Databases provided to BHC, Inc. March 2002

Note: CY2001 encounters are based on paid/adjudicated claims with CY2001 Service Dates.

Prudential (Eastern Region), Community Health Partners (Western Region) and Blue Advantage Plus (Northwestern Region) were not providing services in 2001. A small number of claims attributed to these plans in the database were not included in the analyses.

All EPSDT/HCY Examinations Documented, Birth to Six Years of Age by Plan, Region, and State, CY1998 - CY2001

| All EP-35/MSF Examinations Documented, Birth to Six Years of Age, by Plan, Region, and State, 1998-2001 |                        |       |          |       |     |          |                   |       |          |       |       |          |      |
|---|------------------------|-------|----------|-------|-----|----------|-------------------|-------|----------|-------|-------|----------|------|
|   | 1998                   |       |          | 1999  |     |          | 2000 <sup>a</sup> |       |          | 2001  |       |          |      |
|   | Health Plan            | N     | Eligible | %     | N   | Eligible | %                 | N     | Eligible | %     | N     | Eligible | %    |
| Central   | HealthCare USA         | 9     | 55       | 16.4% | 8   | 105      | 7.6%              | 8     | 55       | 14.5% | 8     | 141      | 5.7% |
|   | Care Partners          | 4     | 51       | 7.8   | 17  | 99       | 17.2              | NA    | NA       | -     | 1     | 10       | 10.0 |
|   | Missouri Care          | 3     | 198      | 1.5   | 15  | 102      | 14.7              | 26    | 118      | 22.0  | 2     | 99       | 2.0  |
| Eastern   | Mercy Health Plan      | 6     | 96       | 6.3   | 4   | 60       | 6.7               | 25    | 143      | 17.5  | 3     | 91       | 3.3  |
|   | Care Partners          | 5     | 170      | 2.9   | 12  | 86       | 14.0              | 22    | 160      | 13.8  | 2     | 64       | 3.1  |
|   | Community Care Plus    | 2     | 92       | 2.2   | 2   | 50       | 4.0               | 19    | 107      | 17.8  | 6     | 136      | 4.4  |
| Western   | HealthCare USA         | 7     | 108      | 6.5   | 17  | 101      | 16.8              | 13    | 107      | 12.1  | 8     | 220      | 3.6  |
|   | Family Health Partners | 3     | 210      | 1.4   | 9   | 96       | 9.4               | 40    | 139      | 28.8  | 10    | 218      | 4.6  |
|   | HealthNet              | 9     | 91       | 9.9   | 16  | 102      | 15.7              | 30    | 98       | 30.6  | 1     | 75       | 1.3  |
|   | Blue Advantage Plus    | 3     | 96       | 3.1   | 7   | 75       | 9.3               | 48    | 152      | 31.6  | 4     | 104      | 3.8  |
|   | FirstGuard Health Plan | 6     | 153      | 3.9   | 7   | 94       | 7.4               | 22    | 130      | 16.9  | 0     | 132      | 0.0  |
|   | Central                | 16    | 304      | 5.3   | 40  | 306      | 13.1              | 34    | 173      | 19.7  | 11    | 250      | 4.4  |
|   | Eastern                | 20    | 466      | 4.3   | 35  | 297      | 11.8              | 79    | 517      | 15.3  | 19    | 511      | 3.7  |
| Western   | 21                     | 550   | 3.8      | 39    | 367 | 10.6     | 140               | 519   | 27.0     | 15    | 529   | 2.8      |      |
| Missouri  | 57                     | 1,320 | 4.3%     | 114   | 970 | 11.8%    | 253               | 1,209 | 20.9%    | 45    | 1,290 | 3.5%     |      |

Table C31

Source: Missouri Patient Care Review Foundation, CY1998, CY1999, and CY2000 EQRO Reports; CY2001 EQRO Medical Record Review

Note: <sup>a</sup> Care Partners Central Region reported with Eastern Region.

NA = Not applicable.

HCFA-416 EPSDT Participation Rates, April 2000 to December 2001

|             |                        | HCFA-416 EPSDT Participation Rates |             |          |         |              |             |
|-------------|------------------------|------------------------------------|-------------|----------|---------|--------------|-------------|
| Health Plan |                        | April-00                           | November-00 | March-01 | June-01 | September-01 | December-01 |
| Central     | HealthCare USA         | 24                                 | 35          | 62       | 61      | 60           | 51          |
|             | Care Partners          | 23                                 | 44          | 42       | NA      | NA           | NA          |
|             | Missouri Care          | 42                                 | 61          | 60       | 60      | 60           | 49          |
| Eastern     | Mercy Health Plan      | 41                                 | 58          | 51       | 50      | 48           | 42          |
|             | Care Partners          | 39                                 | 55          | 52       | 53      | 53           | 46          |
|             | Community Care Plus    | 3                                  | 34          | 46       | 45      | 44           | 39          |
| Western     | HealthCare USA         | 19                                 | 28          | 60       | 58      | 59           | 55          |
|             | Family Health Partners | 47                                 | 77          | 62       | 64      | 65           | 56          |
|             | HealthNet              | 9                                  | 59          | 57       | 56      | 56           | 34          |
|             | Blue Advantage Plus    | 54                                 | 72          | 64       | 64      | 64           | 57          |
|             | FirstGuard Health Plan | 53                                 | 70          | 63       | 63      | 64           | 53          |
|             | Managed Care           | 32                                 | 49          | 58       | 58      | 58           | 51          |
|             | FFS                    | 46                                 | -           | -        | -       | -            | -           |
|             | Medicaid               | 45                                 | -           | 52       | -       | -            | -           |

Table C32

Source: Missouri Department of Social Services, Division of Medical Services, EPSDT Participation Rates, December 2001

Note: NA = Not applicable.

**HEDIS CY1999 and CY2000 Well Child Visit Rates**

|                                     | Well Child Visits       |       |                                |              |
|-------------------------------------|-------------------------|-------|--------------------------------|--------------|
|                                     | First 15 Months of Life |       | 3rd, 4th, 5th 6th Year of Life |              |
|                                     | 1999                    | 2000  | 1999                           | 2000         |
| <b>Health Plan</b>                  |                         |       |                                |              |
| Central<br>HealthCare USA           | 63.26                   | 55.96 | 16.32                          | 12.90        |
| Care Partners                       | 76.74                   | 81.97 | 24.92                          | 27.74        |
| Missouri Care                       | 60.19                   | 98.05 | 54.74                          | 53.04        |
| <b>Eastern</b><br>Mercy Health Plan | 72.87                   | 75.05 | 27.44                          | 26.82        |
| Care Partners                       | 89.36                   | 91.51 | 44.62                          | 46.82        |
| Community Care Plus                 | 83.75                   | 89.70 | 40.65                          | 41.00        |
| <b>Western</b><br>HealthCare USA    | 57.40                   | 45.98 | 33.73                          | 15.86        |
| Family Health Partners              | 97.58                   | 97.38 | 55.37                          | 49.55        |
| HealthNet                           | 86.52                   | 92.70 | 42.58                          | 42.58        |
| Blue Advantage Plus                 | -                       | 92.29 | -                              | 37.41        |
| FirstGuard Health Plan              | 94.96                   | 94.61 | 44.89                          | 45.79        |
| <b>Statewide MC+ Plans Avg</b>      | -                       | 87.50 | -                              | 49.04        |
| <b>Missouri</b>                     | -                       | -     | -                              | <b>51.32</b> |

**Table C33**

Source: Missouri Department of Health and Senior Services; CHIM:  
2000& 2001 Show Me Consumers Guide: Missouri Managed Care  
Plans, HEDIS Indicator Rates  
2000 National Averages for Medicaid & Commercial Measures  
([www.ncqa.org/Programs/HEDIS](http://www.ncqa.org/Programs/HEDIS))

**Immunizations Documented by Plan, Region, and State, CY1998 - 2001**

|                                     | 1998 <sup>a</sup> |              |              | 1999       |            |              | 2000         |              |              | 2001 <sup>b</sup> |              |              |
|-------------------------------------|-------------------|--------------|--------------|------------|------------|--------------|--------------|--------------|--------------|-------------------|--------------|--------------|
|                                     | N                 | Eligible     | %            | N          | Eligible   | %            | N            | Eligible     | %            | N                 | Eligible     | %            |
| <b>Central</b><br>HealthCare USA    | 158               | 340          | 46.5%        | 27         | 88         | 30.7%        | 53           | 69           | 76.8%        | 108               | 152          | 62.2%        |
| Care Partners                       | 82                | 181          | 45.3         | 59         | 113        | 52.2         | NA           | NA           | -            | 8                 | 16           | 50.0         |
| Missouri Care                       | 246               | 619          | 39.7         | 41         | 96         | 42.7         | 129          | 173          | 74.6         | 64                | 128          | 50.0         |
| <b>Eastern</b><br>Mercy Health Plan | 179               | 335          | 53.4         | 12         | 48         | 25.0         | 180          | 246          | 73.2         | 96                | 116          | 82.8         |
| Care Partners                       | 157               | 358          | 43.9         | 53         | 102        | 52.0         | 166          | 234          | 70.9         | 45                | 76           | 59.2         |
| Community Care Plus                 | 213               | 344          | 61.9         | 6          | 34         | 17.6         | 126          | 177          | 71.2         | 132               | 174          | 75.9         |
| <b>Western</b><br>HealthCare USA    | 198               | 309          | 64.1         | 22         | 83         | 26.5         | 117          | 154          | 76.0         | 170               | 263          | 64.6         |
| Family Health Partners              | 226               | 691          | 32.7         | 32         | 69         | 46.4         | 156          | 210          | 74.3         | 133               | 259          | 51.4         |
| HealthNet                           | 182               | 420          | 43.3         | 65         | 93         | 69.9         | 123          | 146          | 84.2         | 51                | 80           | 63.8         |
| Blue Advantage Plus                 | 213               | 557          | 38.2         | 14         | 46         | 30.4         | 196          | 250          | 78.4         | 85                | 118          | 72.0         |
| FirstGuard Health Plan              | 258               | 486          | 53.1         | 26         | 88         | 29.5         | 143          | 183          | 78.1         | 90                | 153          | 58.8         |
| <b>Central</b>                      | 486               | 1,140        | 42.6         | 127        | 297        | 42.8         | 182          | 242          | 75.2         | 180               | 296          | 60.8         |
| <b>Eastern</b>                      | 747               | 1,346        | 55.5         | 93         | 267        | 34.8         | 589          | 811          | 72.6         | 443               | 629          | 70.4         |
| <b>Western</b>                      | 879               | 2,154        | 40.8         | 137        | 296        | 46.3         | 618          | 789          | 78.3         | 359               | 610          | 58.9         |
| <b>Missouri</b>                     | <b>2,112</b>      | <b>4,640</b> | <b>45.5%</b> | <b>357</b> | <b>860</b> | <b>41.5%</b> | <b>1,389</b> | <b>1,842</b> | <b>75.4%</b> | <b>982</b>        | <b>1,535</b> | <b>64.0%</b> |

**Table C34**

Source: CY1998, 1999, 2000 EQRO Reports; 2001 Medical Record Data

Note: Care Partners Central Region reported with Eastern Region.

<sup>a</sup> Includes cases which documented vaccine was "up-to-date" without mention of specific type or dates.

<sup>b</sup> Does not include cases in which documentation only stated vaccination was "up-to-date" without mention of specific type or dates.

NA = Not applicable.

## Immunization Medical Record Documentation, CY2001

|         | Health Plan            | DTP        |            |              | HiB        |            |              | MMR        |            |              | Polio      |            |              |
|---------|------------------------|------------|------------|--------------|------------|------------|--------------|------------|------------|--------------|------------|------------|--------------|
|         |                        | N          | Eligible   | %            | N          | Eligible   | %            | N          | Eligible   | %            | N          | Eligible   | %            |
| Central | HealthCare USA         | 21         | 30         | 70.0%        | 19         | 23         | 82.6%        | 15         | 23         | 65.2%        | 16         | 19         | 84.2%        |
|         | Care Partners          | 2          | 4          | 50.0         | 1          | 1          | 100.0        | 2          | 4          | 50.0         | 2          | 4          | 50.0         |
|         | Missouri Care          | 15         | 28         | 53.6         | 9          | 15         | 60.0         | 9          | 24         | 37.5         | 11         | 21         | 52.4         |
| Eastern | Mercy Health Plan      | 16         | 20         | 80.0         | 13         | 16         | 81.3         | 12         | 18         | 66.7         | 12         | 15         | 80.0         |
|         | Care Partners          | 9          | 15         | 60.0         | 8          | 12         | 66.7         | 5          | 12         | 41.7         | 8          | 8          | 100.0        |
|         | Community Care Plus    | 22         | 32         | 68.8         | 23         | 27         | 85.2         | 15         | 26         | 57.7         | 19         | 26         | 73.1         |
| Western | HealthCare USA         | 34         | 53         | 64.2         | 21         | 33         | 63.6         | 27         | 45         | 60.0         | 25         | 36         | 69.4         |
|         | Family Health Partners | 29         | 56         | 51.8         | 22         | 35         | 62.9         | 17         | 43         | 39.5         | 22         | 40         | 55.0         |
|         | HealthNet              | 10         | 15         | 66.7         | 9          | 13         | 69.2         | 7          | 13         | 53.8         | 5          | 9          | 55.6         |
|         | Blue Advantage Plus    | 17         | 25         | 68.0         | 12         | 17         | 70.6         | 15         | 20         | 75.0         | 12         | 15         | 80.0         |
|         | FirstGuard Health Plan | 17         | 30         | 56.7         | 16         | 22         | 72.7         | 14         | 27         | 51.9         | 14         | 21         | 66.7         |
|         | <i>Central</i>         | 38         | 62         | 61.3         | 29         | 39         | 74.4         | 26         | 51         | 51.0         | 29         | 44         | 65.9         |
|         | <i>Eastern</i>         | 81         | 120        | 67.5         | 65         | 88         | 73.9         | 59         | 101        | 58.4         | 64         | 85         | 75.3         |
|         | <i>Western</i>         | 73         | 126        | 57.9         | 59         | 87         | 67.8         | 53         | 103        | 51.5         | 53         | 85         | 62.4         |
|         | <b>Missouri</b>        | <b>192</b> | <b>308</b> | <b>62.3%</b> | <b>153</b> | <b>214</b> | <b>71.5%</b> | <b>138</b> | <b>255</b> | <b>54.1%</b> | <b>146</b> | <b>214</b> | <b>68.2%</b> |

## Immunization Medical Record Documentation, CY2001 - Continued

|         | Health Plan            | Varicella  |            |              | Hepatitis B |            |              | Pneumococcal |            |              | Total      |              |              |
|---------|------------------------|------------|------------|--------------|-------------|------------|--------------|--------------|------------|--------------|------------|--------------|--------------|
|         |                        | N          | Eligible   | %            | N           | Eligible   | %            | N            | Eligible   | %            | N          | Eligible     | %            |
| Central | HealthCare USA         | 13         | 22         | 59.1%        | 14          | 16         | 87.5%        | 10           | 19         | 52.6%        | 108        | 152          | 71.1%        |
|         | Care Partners          | 0          | 1          | 0.0          | 1           | 1          | 100.0        | 0            | 1          | 0.0          | 8          | 16           | 50.0         |
|         | Missouri Care          | 5          | 12         | 41.7         | 6           | 11         | 54.5         | 9            | 17         | 52.9         | 64         | 128          | 50.0         |
| Eastern | Mercy Health Plan      | 12         | 14         | 85.7         | 15          | 15         | 100.0        | 16           | 18         | 88.9         | 96         | 116          | 82.8         |
|         | Care Partners          | 3          | 11         | 27.3         | 6           | 6          | 100.0        | 6            | 12         | 50.0         | 45         | 76           | 59.2         |
|         | Community Care Plus    | 17         | 22         | 77.3         | 17          | 18         | 94.4         | 19           | 23         | 82.6         | 132        | 174          | 75.9         |
| Western | HealthCare USA         | 24         | 37         | 64.9         | 14          | 20         | 70.0         | 25           | 39         | 64.1         | 170        | 263          | 64.6         |
|         | Family Health Partners | 12         | 30         | 40.0         | 13          | 21         | 61.9         | 18           | 34         | 52.9         | 133        | 259          | 51.4         |
|         | HealthNet              | 6          | 11         | 54.5         | 4           | 6          | 66.7         | 10           | 13         | 76.9         | 51         | 80           | 63.8         |
|         | Blue Advantage Plus    | 11         | 15         | 73.3         | 5           | 8          | 62.5         | 13           | 18         | 72.2         | 85         | 118          | 72.0         |
|         | FirstGuard Health Plan | 11         | 21         | 52.4         | 7           | 11         | 63.6         | 11           | 21         | 52.4         | 90         | 153          | 58.8         |
|         | <i>Central</i>         | 18         | 35         | 51.4         | 21          | 28         | 75.0         | 19           | 37         | 51.4         | 180        | 296          | 60.8         |
|         | <i>Eastern</i>         | 56         | 84         | 66.7         | 52          | 59         | 88.1         | 66           | 92         | 71.7         | 443        | 629          | 70.4         |
|         | <i>Western</i>         | 40         | 77         | 51.9         | 29          | 46         | 63.0         | 52           | 86         | 60.5         | 359        | 610          | 58.9         |
|         | <b>Missouri</b>        | <b>114</b> | <b>196</b> | <b>58.2%</b> | <b>102</b>  | <b>133</b> | <b>76.7%</b> | <b>137</b>   | <b>215</b> | <b>63.7%</b> | <b>982</b> | <b>1,535</b> | <b>64.0%</b> |

Table C35

Source: CY2001 EQRO Medical Record Review

**HEDIS Medicaid Childhood Immunizations, CY1999 & CY2000**

| HEDIS Medicaid Childhood Immunizations |        |        |
|--|--------|--------|
| Health Plan                            | CY1999 | CY2000 |
| Central<br>HealthCare USA              | 25.54  | 45.20  |
| Care Partners                          | 0.00   | 0.00   |
| Missouri Care                          | 50.41  | -      |
| Eastern<br>Mercy Health Plan           | 7.53   | 34.83  |
| Care Partners                          | 50.11  | 39.69  |
| Community Care Plus                    | 51.09  | 43.30  |
| HealthCare USA                         | 43.07  | 34.54  |
| Western<br>Family Health Partners      | 63.02  | 59.61  |
| HealthNet                              | 48.18  | 54.99  |
| Blue Advantage Plus                    | 24.53  | 57.18  |
| FirstGuard Health Plan                 | 55.47  | 49.15  |
| Statewide MC+ Plans Avg                | 44     | 48     |
| Statewide Commercial Plans Avg         | 50     | 52     |
| NCQA Medicaid Rate Avg                 | -      | 51.32  |

**Table C36**

Source: Missouri Department of Health and Senior Services, CHIME (2000). 2001 Show Me Consumers Guide: Missouri Managed Care Plans HEDIS Quality Indicator Rates.

Note: State average excludes n < 30.

| Emergency Room and Hospitalization Rates, CY1999 - CY2000 |                  |         |         |         |        |       |         |         |         |       |       |
|---|------------------|---------|---------|---------|--------|-------|---------|---------|---------|-------|-------|
|   |                  | 1999    |         |         |        |       | 2000    |         |         |       |       |
|   |                  | Eastern | Central | Western | Other  | State | Eastern | Central | Western | Other | State |
| <b>Asthma hospitalizations &lt;19</b>                     | MC+ Managed Care | 7.4     | 3.1     | 3.8     | 3.2    | 5.7   | 7.3     | 3.2     | 4.1     | 0.7   | 5.6   |
|   | Fee-For-Service  | 10.8    | 4.3     | 6.8     | 2.8    | 3.5   | 7.8     | 4.8     | 11.5    | 2.6   | 3.4   |
|   | Non-Medicaid     | 1.5     | 1.0     | 1.0     | 0.8    | 1.1   | 1.3     | 0.9     | 1.1     | 0.9   | 1.1   |
| <b>Asthma emergency room visits &lt;19</b>                | MC+ Managed Care | 37.6    | 13.6    | 27.4    | 27.8   | 31.0  | 33.3    | 12.4    | 24.5    | 23.5  | 27.5  |
|   | Fee-For-Service  | 38.1    | 20.2    | 29.1    | 11.9   | 14.4  | 43.8    | 17.4    | 49.3    | 10.5  | 13.6  |
|   | Non-Medicaid     | 8.1     | 3.5     | 6.3     | 3.9    | 6.0   | 7.4     | 3.1     | 6.0     | 3.6   | 5.5   |
| <b>Emergency Visits &lt;19</b>                            | MC+ Managed Care | 642.3   | 666.4   | 635.1   | 1364.7 | 646.6 | 568.2   | 627.5   | 569.7   | 66.0  | 580.4 |
|   | Fee-For-Service  | 805.0   | 1004.0  | 1054.7  | 786.3  | 799.7 | 897.2   | 1062.2  | 1275.5  | 725.0 | 773.2 |
|   | Non-Medicaid     | 265.5   | 239.7   | 275.1   | 339.6  | 287.1 | 267.7   | 262.8   | 305.9   | 336.6 | 296.4 |
| <b>Preventable hospitalizations &lt;19</b>                | MC+ Managed Care | 13.3    | 9.4     | 9.6     | 16.0   | 11.6  | 14.1    | 11.9    | 10.7    | 16.3  | 12.7  |
|   | Fee-For-Service  | 24.4    | 28.2    | 24.2    | 13.1   | 14.5  | 24.6    | 30.4    | 32.6    | 16.1  | 17.2  |
|   | Non-Medicaid     | 4.3     | 3.5     | 3.6     | 4.4    | 4.1   | 5.5     | 5.5     | 5.3     | 7.0   | 5.9   |

**Table C37**

Source: Missouri Department of Health and Senior Services, Community Health Information Management and Epidemiology (CHIME)

Note: Rates are per 1,000 Population on CHIP.

CHIP Population under 19.

**Births to Mothers Under 18 Years of Age by Plan, Region, MC+ and State, 1997-2000**

|         | <b>Health Plan</b>         | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> |
|---------|----------------------------|-------------|-------------|-------------|-------------|
| Central | HealthCare USA             | 8.7         | 7.5         | 7.4         | 7.6         |
|         | Care Partners              | -           | 11.5        | 8.8         | 5.3         |
|         | Missouri Care              | -           | 9.9         | 7.9         | 5.5         |
| Eastern | Mercy Health Plan          | 7.4         | 9.7         | 9.3         | 5.1         |
|         | Care Partners              | 10.5        | 10.9        | 10          | 9.7         |
|         | Community Care Plus        | 12.4        | 12.4        | 10.8        | 10          |
|         | HealthCare USA             | 9.8         | 9.5         | 9           | 7.8         |
| Western | Family Health Partners     | 12.9        | 10          | 10.3        | 10.4        |
|         | HealthNet                  | 8.7         | 9.2         | 8           | 8.7         |
|         | Blue Advantage Plus        | 8.6         | 7.4         | 8.4         | 7.3         |
|         | FirstGuard Health Plan     | 11.2        | 10.8        | 8           | 9.6         |
|         | <i>Central</i>             | 8.3         | 8.3         | 7.7         | 6.6         |
|         | <i>Eastern</i>             | 10.1        | 10.1        | 9.5         | 8.3         |
|         | <i>Western</i>             | 10.7        | 9.4         | 8.8         | 9.2         |
|         | <i>Total MC+ Plan Rate</i> | 9.9         | NR          | NR          | 8.3         |
|         | <b>Missouri</b>            | <b>5</b>    | <b>-</b>    | <b>-</b>    | <b>4.4</b>  |

**Table C38**

Source: Linked Birth/Medicaid Data Set HAD/CHIME/MDOH, June 26, 2001

Note: Rate per 100 population.  
NR = Not Reported.

**Early Prenatal Care by Plan, Region, MC+ and State, 1998-2000**

|         | <b>Health Plan</b>         | <b>1998</b> | <b>1999</b> | <b>2000</b> |
|---------|----------------------------|-------------|-------------|-------------|
| Central | HealthCare USA             | 74.5        | 70.2        | 79.4        |
|         | Care Partners              | 80.0        | 92.3        | 77.8        |
|         | Missouri Care              | 66.7        | 76.1        | 69.6        |
| Eastern | Mercy Health Plan          | 56.5        | 65.3        | 66.4        |
|         | Care Partners              | 63.9        | 68.8        | 72.4        |
|         | Community Care Plus        | 62.8        | 59.8        | 65.3        |
|         | HealthCare USA             | 67.2        | 68.9        | 73.1        |
| Western | Family Health Partners     | 70.2        | 67.5        | 73.1        |
|         | HealthNet                  | 71.8        | 70.9        | 66.2        |
|         | Blue Advantage Plus        | 74.4        | 73.7        | 72.4        |
|         | FirstGuard Health Plan     | 70.5        | 68.9        | 69.5        |
|         | <i>Central</i>             | 74.0        | 73.9        | 75.1        |
|         | <i>Eastern</i>             | 65.0        | 66.8        | 71.6        |
|         | <i>Western</i>             | 71.4        | 69.8        | 71.0        |
|         | <i>Total MC+ Plan Rate</i> | NR          | NR          | 71.8        |
|         | <b>Missouri</b>            | <b>-</b>    | <b>-</b>    | <b>86.1</b> |

**Table C39**

Source: Linked Birth/Medicaid Data Set HAD/CHIME/MDOH, June 26, 2001

Note: NR = Not Reported.



**Smoking and Counseling Status by Plan and Region, CY2001**

|         | Health Plan            | Smoking Status | Counseling Status | Rate        |
|---------|------------------------|----------------|-------------------|-------------|
|         |                        | N              | N                 | %           |
| Central | HealthCare USA         | 5              | 2                 | 40.0        |
|         | Care Partners          | 3              | 0                 | 0.0         |
|         | Missouri Care          | 11             | 5                 | 45.5        |
| Eastern | Mercy Health Plan      | 5              | 2                 | 40.0        |
|         | Care Partners          | 2              | 1                 | 50.0        |
|         | Community Care Plus    | 1              | 1                 | 100.0       |
|         | HealthCare USA         | 9              | 5                 | 55.6        |
| Western | Family Health Partners | 3              | 0                 | 0.0         |
|         | HealthNet              | 0              | 0                 | 0.0         |
|         | Blue Advantage Plus    | 2              | 2                 | 100.0       |
|         | FirstGuard Health Plan | 2              | 1                 | 50.0        |
|         |                        |                |                   |             |
|         | <i>Central</i>         | 19             | 7                 | 36.8        |
|         | <i>Eastern</i>         | 17             | 9                 | 52.9        |
|         | <i>Western</i>         | 7              | 3                 | 42.9        |
|         | <b>MC+ Plans</b>       | <b>43</b>      | <b>19</b>         | <b>44.2</b> |

**Table C40**

Source: CY2001 EQRO Medical Record Review

**Smoking During Pregnancy by Plan, Region, MC+ and State**

|         | Health Plan                | 1998 | 1999 | 2000        |
|---------|----------------------------|------|------|-------------|
|         |                            |      |      |             |
| Central | HealthCare USA             | 38.1 | 32.7 | 37.5        |
|         | Care Partners              | 32.8 | 41.2 | 42.2        |
|         | Missouri Care              | 39.5 | 36.9 | 38.7        |
| Eastern | Mercy Health Plan          | 22.3 | 26.3 | 26.5        |
|         | Care Partners              | 20.5 | 19.1 | 21.0        |
|         | Community Care Plus        | 18.3 | 20.8 | 23.4        |
|         | HealthCare USA             | 26.1 | 25.6 | 25.6        |
| Western | Family Health Partners     | 31.8 | 30.3 | 31.1        |
|         | HealthNet                  | 29.4 | 25.5 | 26.7        |
|         | Blue Advantage Plus        | 29.8 | 29.7 | 30.4        |
|         | FirstGuard Health Plan     | 25.9 | 25.9 | 24.0        |
|         |                            |      |      |             |
|         | <i>Central</i>             | 37.5 | 34.9 | 38.4        |
|         | <i>Eastern</i>             | 23.6 | 23.4 | 24.4        |
|         | <i>Western</i>             | 29.3 | 28.2 | 28.2        |
|         | <i>Total MC+ Plan Rate</i> | NR   | NR   | 28.0        |
|         | <b>Missouri</b>            | -    | -    | <b>18.3</b> |

**Table C41**Source: Linked Birth/Medicaid Data Set  
HAD/CHIME/MDOH, June 26, 2001

**Cesarean Section Rates by Plan and Region, 1997-2000**

|         | Health Plan                | 1998 | 1999 | 2000        |
|---------|----------------------------|------|------|-------------|
| Central | HealthCare USA             | 21.3 | 23.3 | 25.7        |
|         | Care Partners              | 19.1 | 26.3 | 18.7        |
|         | Missouri Care              | 17.0 | 20.4 | 22.3        |
| Eastern | Mercy Health Plan          | 21.4 | 22.5 | 20.4        |
|         | Care Partners              | 18.3 | 19.2 | 17.8        |
|         | Community Care Plus        | 15.0 | 16.5 | 17.9        |
|         | HealthCare USA             | 18.8 | 19.6 | 19.1        |
| Western | Family Health Partners     | 16.4 | 15.8 | 16.8        |
|         | HealthNet                  | 17.5 | 18.1 | 16.4        |
|         | Blue Advantage Plus        | 13.6 | 15.3 | 17.1        |
|         | FirstGuard Health Plan     | 16.3 | 14.8 | 15.8        |
|         | <i>Central</i>             | 19.7 | 22.5 | 23.7        |
|         | <i>Eastern</i>             | 18.7 | 19.3 | 18.7        |
|         | <i>Western</i>             | 15.9 | 15.8 | 16.5        |
|         | <i>Total MC+ Plan Rate</i> | NR   | NR   | 18.8        |
|         | <b>Missouri</b>            | -    | -    | <b>22.9</b> |

**Table C42**

Source: Missouri Department of Health and Senior Services, HAD/CHIME (June 26, 2001). HEDIS Indicator By Missouri Medicaid Managed Care Plans Within Regions

Note: Rate per 100 live births.

**Low Birth Weight (< 2500 G)<sup>a</sup> by Plan, Region, MC+ and State, 1998-2000**

|         | Health Plan                | 1998 | 1999 | 2000       |
|---------|----------------------------|------|------|------------|
| Central | HealthCare USA             | 8.1  | 9.1  | 9.0        |
|         | Care Partners              | 0.0  | 9.1  | 4.8        |
|         | Missouri Care              | -    | 15.5 | 19.1       |
| Eastern | Mercy Health Plan          | 19.3 | 13.9 | 9.3        |
|         | Care Partners              | 12.9 | 17.3 | 12.8       |
|         | Community Care Plus        | 9.2  | 11.6 | 13.8       |
|         | HealthCare USA             | 15.5 | 14.4 | 14.0       |
| Western | Family Health Partners     | 13.1 | 12.4 | 10.2       |
|         | HealthNet                  | 17.6 | 11.0 | 9.3        |
|         | Blue Advantage Plus        | 6.9  | 7.7  | 10.4       |
|         | FirstGuard Health Plan     | 12.5 | 7.9  | 11.5       |
|         | <i>Central</i>             | 6.9  | 11.3 | 13.0       |
|         | <i>Eastern</i>             | 13.3 | 14.3 | 13.3       |
|         | <i>Western</i>             | 12.1 | 9.6  | 10.5       |
|         | <i>Total MC+ Plan Rate</i> | NR   | NR   | 12.5       |
|         | <b>Missouri</b>            | -    | -    | <b>7.6</b> |

**Table C43**

Source: Linked Birth/Medicaid Data Set  
HAD/CHIME/MDOH, June 26, 2001

Note: <sup>a</sup> Among women continuously enrolled for 12 months prior to delivery (a gap of up to 45 days was allowed).

**Blood Lead Assessments for 12 Months of Age by Plan, Region, and State, 1998 - 2001**

|                        | 1998 <sup>a</sup> |          |       | 1999 <sup>a</sup> |          |       | 2000 <sup>a</sup> |          |       | 2001 <sup>b</sup> |          |       | 2001 |
|------------------------|-------------------|----------|-------|-------------------|----------|-------|-------------------|----------|-------|-------------------|----------|-------|------|
|                        | N                 | Eligible | %     | N                 | Eligible | %     | N                 | Eligible | %     | N                 | Eligible | %     |      |
| Central                |                   |          |       |                   |          |       |                   |          |       |                   |          |       |      |
| HealthCare USA         | 1                 | 12       | 8.3%  | 3                 | 9        | 33.3% | 1                 | 9        | 11.1% | 4                 | 15       | 26.7% |      |
| Care Partners          | 1                 | 9        | 11.1  | 3                 | 9        | 33.3  | NA                | NA       | NA    | 0                 | 1        | 0.0   |      |
| Missouri Care          | 1                 | 12       | 8.3   | 2                 | 9        | 22.2  | 5                 | 16       | 31.3  | 1                 | 14       | 7.1   |      |
| Eastern                |                   |          |       |                   |          |       |                   |          |       |                   |          |       |      |
| Mercy Health Plan      | 2                 | 11       | 18.2  | 2                 | 5        | 40.0  | 4                 | 22       | 18.2  | 3                 | 15       | 20.0  |      |
| Care Partners          | 4                 | 11       | 36.4  | 3                 | 10       | 30.0  | 10                | 19       | 52.6  | 0                 | 8        | 0.0   |      |
| Community Care Plus    | 3                 | 15       | 20.0  | 0                 | 3        | 0.0   | 1                 | 12       | 8.3   | 9                 | 21       | 42.9  |      |
| HealthCare USA         | 5                 | 17       | 29.4  | 4                 | 10       | 40.0  | 2                 | 14       | 14.3  | 10                | 31       | 32.3  |      |
| Western                |                   |          |       |                   |          |       |                   |          |       |                   |          |       |      |
| Family Health Partners | 1                 | 18       | 5.6   | 0                 | 1        | 0.0   | 4                 | 14       | 28.6  | 8                 | 27       | 29.6  |      |
| HealthNet              | 1                 | 13       | 7.7   | 1                 | 10       | 10.0  | 4                 | 13       | 30.8  | 3                 | 10       | 30.0  |      |
| Blue Advantage Plus    | 1                 | 20       | 5.0   | 0                 | 3        | 0.0   | 8                 | 19       | 42.1  | 3                 | 13       | 23.1  |      |
| FirstGuard Health Plan | 3                 | 21       | 14.3  | 2                 | 9        | 22.2  | 6                 | 16       | 37.5  | 4                 | 22       | 18.2  |      |
| Central                | 3                 | 33       | 9.0   | 8                 | 27       | 29.6  | 6                 | 25       | 24.0  | 5                 | 30       | 16.7  |      |
| Eastern                | 14                | 54       | 25.9  | 9                 | 28       | 32.1  | 17                | 67       | 25.4  | 22                | 75       | 29.3  |      |
| Western                | 6                 | 72       | 8.3   | 3                 | 23       | 13.0  | 22                | 62       | 35.5  | 18                | 72       | 25.0  |      |
| Missouri               | 23                | 159      | 14.5% | 20                | 78       | 25.6% | 45                | 154      | 29.2% | 45                | 177      | 25.4% |      |

**Table C44**

Source: <sup>a</sup> Missouri Patient Care Review Foundation. (1998, 1999, 2000). External Quality Review of MC+ Managed Care in Missouri: Calendar Years 1998, 1999, 2000

<sup>b</sup> BHC, Inc. (2002). External Quality Review of MC+ Managed Care in Missouri: Calendar Year 2001

Notes: Care Partners Central Region reported with Care Partners East Region in CY2000.

NA = Not Applicable.

**Blood Lead Assessments for 24 Months of Age by Plan, Region, and State, 1998 - 2001**

|                        | 1998 <sup>a</sup> |          |       | 1999 <sup>a</sup> |          |       | 2000 <sup>a</sup> |          |       | 2001 <sup>b</sup> |          |       |  |
|------------------------|-------------------|----------|-------|-------------------|----------|-------|-------------------|----------|-------|-------------------|----------|-------|--|
|                        | N                 | Eligible | %     | N                 | Eligible | %     | N                 | Eligible | %     | N                 | Eligible | %     |  |
| Central                |                   |          |       |                   |          |       |                   |          |       |                   |          |       |  |
| HealthCare USA         | 1                 | 13       | 7.7%  | 1                 | 10       | 10.0% | 0                 | 1        | 0.0%  | 0                 | 14       | 0.0%  |  |
| Care Partners          | 0                 | 7        | 0.0   | 2                 | 10       | 20.0  | NA                | NA       | NA    | 0                 | 0        | 0.0   |  |
| Missouri Care          | 2                 | 9        | 22.2  | 2                 | 13       | 15.4  | 5                 | 10       | 50.0  | 0                 | 6        | 0.0   |  |
| Eastern                |                   |          |       |                   |          |       |                   |          |       |                   |          |       |  |
| Mercy Health Plan      | 1                 | 11       | 9.1   | 1                 | 7        | 14.3  | 2                 | 6        | 33.3  | 0                 | 4        | 0.0   |  |
| Care Partners          | 2                 | 7        | 28.6  | 0                 | 4        | 0.0   | 6                 | 14       | 42.9  | 0                 | 9        | 0.0   |  |
| Community Care Plus    | 0                 | 3        | 0.0   | 0                 | 6        | 0.0   | 0                 | 6        | 0.0   | 4                 | 12       | 33.3  |  |
| HealthCare USA         | 1                 | 6        | 16.7  | 0                 | 7        | 0.0   | 3                 | 10       | 30.0  | 3                 | 16       | 18.8  |  |
| Western                |                   |          |       |                   |          |       |                   |          |       |                   |          |       |  |
| Family Health Partners | 1                 | 19       | 5.3   | 3                 | 17       | 17.6  | 7                 | 14       | 50.0  | 2                 | 17       | 11.8  |  |
| HealthNet              | 1                 | 8        | 12.5  | 2                 | 17       | 11.8  | 1                 | 6        | 16.7  | 1                 | 5        | 20.0  |  |
| Blue Advantage Plus    | 1                 | 9        | 11.1  | 1                 | 13       | 7.7   | 4                 | 11       | 36.4  | 0                 | 10       | 0.0   |  |
| FirstGuard Health Plan | 2                 | 14       | 14.3  | 0                 | 5        | 0.0   | 2                 | 11       | 18.2  | 0                 | 4        | 0.0   |  |
| Central                | 3                 | 29       | 10.3  | 5                 | 33       | 15.2  | 5                 | 11       | 45.5  | 0                 | 20       | 0.0   |  |
| Eastern                | 4                 | 27       | 14.8  | 1                 | 24       | 4.2   | 11                | 36       | 30.6  | 7                 | 41       | 17.1  |  |
| Western                | 5                 | 50       | 10.0  | 6                 | 52       | 11.5  | 14                | 42       | 33.3  | 3                 | 36       | 8.3   |  |
| Missouri               | 12                | 106      | 11.3% | 12                | 109      | 11.0% | 30                | 89       | 33.7% | 10                | 97       | 10.3% |  |

**Table C45**

Source: <sup>a</sup> Missouri Patient Care Review Foundation. (1998, 1999, 2000). External Quality Review of MC+ Managed Care in Missouri: Calendar Years 1998, 1999, 2000

<sup>b</sup> BHC, Inc. (2002). External Quality Review of MC+ Managed Care in Missouri: Calendar Year 2001

Notes: Care Partners Central Region reported with Care Partners East Region in CY2000.

NA = Not Applicable.

## Appendix D: Supporting Documents



**Missouri Department of Insurance**  
301 West High Street  
P.O. Box 690  
Jefferson City, Missouri 65102  
(573) 751-4126

[Bob Holden](#)  
Governor

[Scott B. Lakin](#)  
Director

## **Health Maintenance Organization Network Access Plan Instructions**

### **The Access Plan<sup>1</sup>**

Pursuant to §354.603, RSMo (H.B. 328&88, 2001) HMOs licensed in the state of Missouri must file an Access Plan with the Missouri Department of Insurance (MDI). The Access Plan must include the following information:

1. A description of the health carrier's network;
2. A description of the HMO's procedures for making referrals within and outside its network;
3. A description of the HMO's process for monitoring and assuring on an ongoing basis the sufficiency of the network to meet the health care needs of enrollees of the managed care plan;
4. A description of the HMO's method for assessing the health care needs of enrollees and their satisfaction with services;
5. A description of the HMO's method of informing enrollees of the plan's services and features, including but not limited to, the plan's grievance procedures, its process for choosing and changing providers, and its procedures for providing and approving emergency and specialty care;
6. A description of the HMO's system for ensuring the coordination and continuity of care for enrollees referred to specialty physicians, for enrollees using ancillary services (including social services and other community resources) and for ensuring appropriate discharge planning;

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1

Missouri Department of Insurance. (2002). Health Maintenance Organization: Network Access Plan Instructions. [www.sos.state.mo.us/adrules/csr/current/20csr/20c400-7.pdf](http://www.sos.state.mo.us/adrules/csr/current/20csr/20c400-7.pdf).

7. A description of the HMO's process for enabling enrollees to change primary care physicians;
8. A description of the HMO's proposed plan for providing continuity of care in the event of contract termination between the health carrier and any of its participating providers, a reduction in service area or the health carrier's insolvency or other inability to continue operations. The description shall explain how enrollees would be notified should any of these events occur, and how enrollees would be transferred to other providers in a timely manner; and
9. Any other information required by the director to determine compliance with the provisions of §RSMo 354.600-354.636
  - Annual access plans must be submitted on or before **February 1st** of each year.
  - A new access plan must be filed if the HMO experiences a significant change in its network or enrollment before the annual filing date.

### **Alternative Compliance**

Health Plans offered to enrollees which are subject to other network adequacy standards established by a governmental or quasi-governmental agency may be allowed to demonstrate the adequacy of their network with reference to those standards in lieu of the network adequacy standards contained in 20 CSR 400-7.095(2). Examples include plans subject to Medicare risk standards and Missouri Consolidated Health Care Plan (MCHCP) standards. It will be necessary for the health carrier to provide documentation from the governing agency which states the network complies with their standards. If this method of compliance is utilized, it is still necessary to provide parts 2 through 9 above of the network adequacy plan as set forth by §354.603.2, RSMo and 20 CSR 400-7.095(3) and (4).

Compliance with standards established by the MC+ program (Medicaid) is no longer an alternative compliance mechanism. Companies that have utilized this as an alternative compliance mechanism in the past will no longer have that option.



## MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES

**RISK APPRAISAL FOR PREGNANT WOMEN**

INSTRUCTIONS ON REVERSE SIDE

MC+ AGENCY NAME

CLIENT SOCIAL SECURITY NO.

PROVIDER NAME (ATTACH MEDICAID PROVIDER LABEL)

ADDRESS (STREET)

CITY STATE ZIP CODE

MEDICAID PROVIDER NUMBER

MONTH PRENATAL CARE

BEGAN

☐ 1 ☐ 2 ☐ 3 ☐ 4☐ 5 ☐ 6 ☐ 7☐ 8 ☐ 9

MARITAL STATUS CODE

☐ S ☐ M ☐ W ☐ D ☐ SEPRACE/ETHNICITY ☐ 1. WHITE ☐ 2. BLACK ☐ 3. AM.IND./ALASKAN☐ 4. ASIAN ☐ 5. PACIFIC ISLANDER ☐ 6. OTHER

HISPANIC ORIGIN

☐ YES ☐ NO

LMP (MM/DD/YY)

GRAVIDA

PARA

ABORTA

**PUT AN "X" IN ALL THE BOXES BELOW THAT APPLY. AN "X" IN ANY ONE OF THE FIRST 34 RISK FACTOR BOXES QUALIFIES CLIENT FOR CASE MANAGEMENT SERVICES.**☐ 1. Mother's age 17 years or less at time of conception☐ 2. Mother's education less than 8 years☐ 3. Gravida greater than or equal to 7☐ 4. Currently smoking☐ 5. Mother's age 35 years or greater at time of conception☐ 6. Prepregnancy weight less than 100 lbs☐ 7. Previous fetal death (20 weeks gestation or later)☒ Previous infant death☐ 9. History of incompetent cervix in current or past pregnancy☐ 10. History of diabetes mellitus including gestational diabetes in current or past pregnancy☐ 11. Multiple fetuses in current pregnancy☐ 12. Pre-existing hypertension (a history of hypertension — 140/90 mm Hg or greater — antedating pregnancy or discovery of hypertension — 140/90 or greater — before the 20th week of pregnancy)☐ 13. Pregnancy-induced hypertension in current pregnancy (blood pressure is 140/90 or greater, or there has been an increase of 30 mm Hg systolic or 15 mm Hg diastolic over baseline values on at least two occasions six or more hours apart)☐ 14. Prior low birth weight baby (<2500 grams or 5 lbs. 8 oz.)☐ 15. Prior preterm labor (<37 completed weeks gestation)☐ 16. Preterm labor: current pregnancy☐ 17. Seropositive for HIV antibodies☐ 18. Interconceptional spacing <1 year☐ 19. Living alone or single parent living alone☐ 20. Considered relinquishment of infant☐ 21. Unfavorable environmental conditions☐ 22. Late entry into care (after 4th month or 18 weeks gestation)☐ 23. Homelessness☐ 24. Alcohol abuse by client☐ 25. Alcohol abuse by partner☐ 26. Drug dependence or misuse by client☐ 27. Drug dependence or misuse by partner☐ 28. Physical or emotional abuse/neglect of client☐ 29. Physical abuse of children in the home☐ 30. Neglect of children in the home☐ 31. Partner with history of violence☐ 32. Chronic or recent mental illness and/or psychiatric treatment☐ 33. Elevated blood lead level 15-19ug/dl or greater☐ 34. Other, identify: \_\_\_\_\_☐ 99. None of the above**FOLLOWING DOES NOT QUALIFY FOR CASE MANAGEMENT SERVICES. DATA COLLECTION IS NECESSARY FOR PROGRAM PLANNING. (CHECK ONE)**☐ 1. Intended pregnancy☐ 2. Unintended pregnancy using birth control☐ 3. Unintended pregnancy not using birth control☐ 4. Unintended pregnancy - birth control unknown

SPECIFY GESTATIONAL AGE AT TIME OF

R. APPRAISAL: \_\_\_\_\_ WEEKS

APPROXIMATE DUE DATE

MM DD YY

PHYSICIAN'S PERFORMING PROVIDER NUMBER

PROVIDER SIGNATURE

DATE

PREFERRED CASE MANAGEMENT PROVIDER AGENCY

# Risk Appraisal Form for Pregnant Women

## Purpose:

To document the appraisal "at risk conditions for determining client's eligibility for Medicaid Case Management Services.

## Distribution:

White & Canary — Missouri Department of Health  
copies BSHCN/Case Management

Green copy — Client

*(Fold forms on lines with postage paid business reply  
on outside. Seal with staple or tape.)*

Pink copy — Client's Record

## Instructions:

### (Shaded area)

**Medicaid Provider Box** — Attach Medicaid Provider Label to each copy or:

**Provider Name** — Print or type provider name of the Agency completing the Risk Appraisal

**Address** — Provider Agency address, (Street or Box number, City, State and Zip code)

**Medicaid Provider Number** — 9 digit Missouri Medicaid Number assigned by the Medicaid State Agency for billing identification purposes.

**DCN** — Enter the 8 digit number assigned to eligible Medicaid recipients.

**Birth Date** — Enter the client's birth date as it is shown on the Medicaid card. (Use MM/DD/YY format.)

**Date** — Enter date the Risk Appraisal was conducted. (Use MM/DD/YY format.)

**Client's Name** — Enter last name, first name, middle initial, and maiden name of client.

**Address** — Enter street number and name or rural route and box number.

**City, State, Zip Code** — Enter as usual.

**Telephone** — Enter telephone number of client (include area code).

**County** — Enter county of residence.

**Marital Status Code** — Check the appropriate box.

**Race Code** — Check the appropriate race box even if client is Hispanic (Hispanic is not a race).

**Hispanic Origin** — Check the appropriate box.

**LMP** — Enter date of last normal menstrual period. (Use MM/DD/YY format.)

**Gravida** — Enter the number of times client has been pregnant including this pregnancy.

**Para** — Enter the number of previous deliveries 20 weeks gestation or beyond (includes stillborns).

**Aborta** — Enter the number of spontaneous and/or induced abortions experienced by client.

**Risk Factors** — Enter an "X" in all of the boxes that apply to client. An "X" in any one of the first 34 boxes qualifies client for case management services.

**Intended/Unintended Pregnancy** — Check the appropriate box.

**Specify Gestational Age** — Enter the number of weeks pregnant at the time of the Risk Appraisal.

**Approximate Due Date** — Enter the approximate due date. (Use MM/DD/YY format.)

**Physician's Performing Provider Number** — Enter the Medicaid performing provider number of the physician or nurse practitioner affiliated with the clinic/agency.

**Provider signatures** — Sign and date. May be signed by an RN or physician.

**Preferred Case Management Provider** — Enter the name of the case management provider agency chosen by client.